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ABSTRACT

This document is a report of a study that was conducted to provide a comprehensive, up-to-date compilation of data regarding professional and occupational practice requirements in Pennsylvania, focusing on the role of continuing professional education in the various credentialing processes. Following a discussion of the methodology and results of the study, the main part of the report is made up of summaries of 68 professions and occupations that present information for use by those involved in continuing professional education program development. In addition to outlining the requirements for individuals wishing to obtain mandatory or voluntary credentials, the summaries provide background information on the development of the profession or occupation and material on current trends within the field, along with names and addresses of resource persons. A section on the climate for continuing education has been included in each summary to give continuing educators an overview of the group's perceived need for and interest in continuing education programs. The primary function of the summaries is to assist the continuing educator in identifying those professions and occupations warranting further exploration as continuing professional education target groups. (KC)

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- To establish collaborative relationships between the University and the professions in order to strengthen the development and implementation of continuing professional education programs
 - To develop and implement practice-oriented continuing professional education programs through the application of the Practice Audit Model to six selected professions
 - To develop models of the University/profession collaborative relationship for continuing professional education which can lead to its institutionalization
-

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PROFESSIONAL AND OCCUPATIONAL PRACTICE REQUIREMENTS

A Continuing Professional Education Series

Third Edition

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December, 1984

**Planning Studies in Continuing Education
235 Grange Building
The Pennsylvania State University
University Park, Pennsylvania 16802**

This report represents an updating of previous editions of Professional and Occupational Practice Requirements: A Continuing Professional Education Series. Originally undertaken a decade ago as an ongoing project of Planning Studies in Continuing Education at The Pennsylvania State University, the compilation is intended to serve as a working document for continuing educators and others concerned with the preparation and continued learning of professional and occupational practitioners. It has grown in both scope and depth since the original report on thirteen professions and occupations was compiled by Benjamin Nead in 1974.

In addition to the several Planning Studies staff members who have contributed significantly to past and current editions of this report, the resource people for the various professions and occupations have been instrumental in enabling us to compile the material. Their help is very much appreciated.

Donna S. Queeney
Assistant Director/Editor
Planning Studies in Continuing Education

December, 1984

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INTRODUCTION

Continuing professional education has been a topic of concern for some years, growing in importance and prominence over the past decade as educational institutions, professional associations, and others have sought to meet the growing learning needs of professional and occupational practitioners in a large number of fields. Continuing professional education is tied to questions of competence, public demand for accountability of practitioners, the introduction and growth of mandatory continuing education, and an increased infusion of new knowledge and technology into the professions.

As interest in continuing professional education swept across the nation, many groups grasped at it as a panacea, the answer to all ills and criticism facing the professions. However, it was not long before those people concerned with the broad issue, that of improving practitioner competence, emphasized that continuing professional education in itself could not be assumed to address the improved practice goals of individual practitioners, the professions, or the public at large. Rather, they recognized that continuing professional education as a concept must be developed properly and applied with care. Continuing professional education does not lend itself to precipitous action or impromptu program development.

At The Pennsylvania State University career education has long been one of the three major parts of the Continuing Education program, the other components being personal development and community service. The goal of a carefully developed program, responsive to the needs of Pennsylvania practitioners, has guided the evolution of the University's work in continuing professional education.

Background

In January, 1976, Penn State's vice president for Continuing Education appointed a Committee on Continuing Professional and Occupational Education to study what had been done in the field of continuing professional education, examine national trends, assess continuing professional and occupational education at the University, and make recommendations. The committee's 1977 report responded to these charges and laid the groundwork for future directions at Penn State.

In summarizing general trends in the University's program, the committee stated:

The dominant feature of the entire continuing education program is professional and occupational education. The overwhelming motivation that brings students to the credit and non-credit courses and services is a desire to improve professional or occupational status. The motivation comes from the individuals themselves, or, indirectly, from their employers, government regulation, or professional associations and societies to which they belong. In many cases their participation is required in a form of mandatory continuing education, a state of mind or condition which has evolved from educational practices in pre-service education and from the rapid pace of development of new knowledge and its application in an industrial society. (Froke, 1977)

Because of this reality, the committee recommended that the University retain professional and occupational education as its primary continuing education emphasis.

The committee's report also identified four major trends, expected to have a substantial impact on the future of continuing higher education in the 1980s and 1990s.

1. Licensing and certification of persons who practice in the professions and occupations are expected to increase with emphasis on continuing education as a means of assuring competence.
2. Employee educational benefits, including direct payment of tuition as well as tuition reimbursements, have increased dramatically in recent years, partly at the initiative of the employer and partly in

response to adoption of educational benefits as a major issue in union-management negotiations.

3. Institutions and agencies whose primary societal function is something other than education have become major purveyors of continuing education in the professions and occupations.
4. Part-time students, principally adults, are becoming less interested in the occasional credit courses and more interested in patterns of course enrollments that lead to long-term educational objectives, including degrees. As a consequence, educational planning based on demographic data and other resources is an increasingly important component of the total continuing higher education system. (Froke, 1977)

As these trends were discussed in the report, recommendations were made regarding the University's role in responding to them. The development of a central collection of information about professional and occupational regulation was one of those recommendations.

The beginning of such a collection already existed. In 1974, Planning Studies had prepared "Continuing Education Requirements in the Professions and Trades" to provide an overview of continuing education requirements for thirteen professions and occupations (Nead, 1974). Building on that information, Professional and Occupational Practice Requirements: A Continuing Professional Education Series was begun by Planning Studies staff members in 1978. They completed two informal installments of the series in June and December, 1979, supplying information on fifty-five professions and occupations. A more complete report, issued in February, 1980, utilized the material from those two installments in presenting a comprehensive picture of professional and occupational regulation in Pennsylvania and its implications for continuing higher education.

The second edition of Professional and Occupational Practice Requirements: A Continuing Professional Education Series was published in May, 1981 and updated in December, 1982. Including information on seventy-five

professions and occupations, it represented both an expansion and an updating of the earlier work. All information on the professions and occupations addressed earlier was revised as necessary to reflect changes in legislation, certification requirements, and other pertinent material.

This third edition recognizes the continuing need to update the information being addressed. The changing nature of practice in many professions and occupations, exponentially increasing volumes of knowledge, and a growing tendency toward specialization in many fields are among the trends that cause professional and occupational practice requirements to change somewhat frequently. The third edition was expanded somewhat with the inclusion of two new professions and occupations.

Professional and Occupational Practice Requirements should be viewed in the broader context of Planning Studies' work in the area of continuing professional education. Much of that work has been guided by the above-cited report of the Committee on Continuing Professional and Occupational Education. It was also in response to the recommendations of that committee that the five-year University-wide Continuing Professional Education Development Project was undertaken in July, 1980. Conducted by Planning Studies in conjunction with the Center for the Study of Higher Education, the project has been funded by the W. K. Kellogg Foundation, Penn State, and fourteen participating state and national professional associations. The project has three major goals:

- To establish collaborative relationships between the University and the professions in order to strengthen the development and implementation of continuing professional education programs.
- To develop and implement practice-oriented continuing professional education programs through the application of the Practice Audit Model to six selected professions.

- To develop models of the University/profession collaborative relationship for continuing professional education which can lead to its institutionalization.

Using a seven-phase needs assessment/program development process outlined by the Practice Audit Model, the project has worked with five professions to address those goals. The professions are accounting, architecture, clinical dietetics, clinical psychology, and nursing. A sixth profession, medicine, has followed a somewhat different process, working with the medical audit.

Objectives of this Study

The study of which this report is a part has one primary objective:

To provide a comprehensive, up-to-date compilation of data regarding professional and occupational practice requirements in Pennsylvania, focusing on the role of continuing professional education in the various credentialing processes. This material is intended to function as a useful resource to those serving Pennsylvania's practitioners through the provision of initial professional education, regulation, and continuing education.

The study also has four secondary objectives:

1. To develop and apply a methodology for working with educators, professional associations, regulatory agencies, and practitioners to obtain relevant data on professional and occupational regulation and the role of continuing education in its implementation.
2. To observe state and national trends, both within and across professions, regarding regulatory practices and attitudes toward and participation in continuing professional education.
3. To identify potential continuing education target groups.
4. To identify resource persons within the professions and occupations who might aid the Continuing Education staff of The Pennsylvania State University in defining areas for program development.

PROCEDURE

Inherent in the fulfillment of the primary objective of this study is an ongoing process; existing information must be updated periodically if it is to remain current, and professions and occupations must be added as their individual development qualifies them for inclusion or as they are identified in the general striving for comprehensiveness. Thus the procedure of the study is not one with a beginning, middle, and end, but rather takes the form of a continuous cycle.

Profession vs. Occupation: A Problem of Definition

As the title of this publication indicates, both professions and occupations have been considered. However, there has been no attempt made to differentiate between the two because of the difficulty in defining what constitutes a profession as compared to, or contrasted with, an occupation. While all fields included in this report have been treated in a like manner, it is worth noting that the problem of defining professions is nationally recognized as a substantial one. Unanimous agreement on those characteristics which define a profession cannot be claimed; however the following material summarizes thinking on the attributes that characterize a profession.

Abraham Flexner, recognized leader in medical education in the early 1900s, suggested that ". . . the possession of certain portions of many sciences arranged and organized with a distinct practical purpose in view . ." is what makes medicine a profession. He noted that the "special training" required of physicians is an important factor in medicine's professional status. (Flexner, 1925) As long ago as 1915 Flexner further suggested that any profession should meet the following conditions.

- (a) The objectives of professional work are definite and immediately practical.
- (b) Educationally communicable techniques for the attainment of those objectives are available.
- (c) Applications of techniques involve essentially intellectual operations, and practitioners exercise responsible discretion in matching techniques to individual problems.
- (d) The techniques are related to a systematic discipline, such as science, theology, or law, whose substance is large and complex, and hence ordinarily inaccessible to laymen.
- (e) Members of the profession are organized in some kind of society, with rules for membership and exclusion based in part on professional competence.
- (f) The aims of the professional organization are at least in part altruistic rather than merely self-serving, and entail a code of ethics whose sanctions are also invoked, along with those of competence, in determining membership in the society and therefore legitimate practice of the profession. (Flexner, 1915)

Since Flexner's pronouncements, a number of others have considered the nature of a profession. In 1974, G. Lester Anderson wrote:

Professional activities have a large intellectual component; the skill, craftsmanship or practice of a profession rests on a body of knowledge. This knowledge is not only empirically derived but is also a product of research or scholarly activity. The practice of a profession involves a craftsmanship; meaning knowledge is put to use; this craftsmanship is teachable and learnable, and is socially useful. Society allocates to those who practice a profession a great measure of control of the education for it and the right to be self-policing. The quality of professional service, it is presumed, is to be judged only by other professionals in the same field. Hence, a profession is governed by a code of ethical conduct to which its members are held, and the professional person is presumed to be basically motivated by altruism. (Anderson, 1974)

Other definitions appearing in the early 1970s included one by Edgar Schein indicating, "The professions are a set of occupations that have developed a very special set of norms deriving from their special role in society." Schein noted that the problems inherent in defining a profession

stem from the attempt to precisely define that which is imprecise, an occupational or societal role that ". . . varies as a function of the setting within which it is performed, that is itself evolving, and that is perceived differently by different segments of society." Some of the characteristics which Schein attributed to a profession are:

full-time occupation comprising principal source of income

practitioner has strong motivation or calling

specialized body of knowledge and skills acquired through prolonged period of education and training

practitioner makes decisions on behalf of a client, on the basis of recognized general principles, theories, or propositions

practitioner has a service orientation

service to the client is assumed to be based on objective client needs

practitioner is assumed to know better what is good for the client than does the client

professional association defines criteria of admission to the profession, educational standards, licensing, career lines, and professional jurisdiction

knowledge is assumed to be specific

practitioners make services available to clients but do not advertise or seek out clients.

Many of these criteria tend to fit the "traditional" professions, as identified above, more than those fields more recently recognized as being professional in nature. Schein suggests that the varying degrees to which his criteria fit individual professions might indicate a "scale of professionalization". (Schein, 1972)

In line with this notion of a scale of professionalization, it is important to acknowledge that there are no agreed upon, hard and fast lines between professions and occupations. Some fields, like law and medicine, are well

established as professions and are recognized as such. Other groups, which also provide service to society, are less clearly recognized as professions in terms of educational qualifications, representation by a professional association, and regulation through licensure or other legal means. Many of these groups are aspiring to professional status. (Phillips, 1980) Related to this notion, Ernest Greenwood suggested that five specific characteristics are associated with what he refers to as the "process of professionalization".

1. a basis of systematic theory
2. authority recognized by the clientele of the professional group
3. broader community sanction and approval of this authority
4. a code of ethics
5. a professional culture

(Greenwood, 1966)

At this time, perhaps the most widely respected discussion within continuing education on the meaning of professionalization is included in Cyril O. Houle's 1980 book on continuing learning. He observes that instead of asking whether or not a particular occupational group is a profession, one might ask how professionalized it is. He talks about the more traditional definition of profession, and about professionalism as a static concept. He says that the rising level of criticism of the past quarter century suggests that the effort to give a restrictive and lofty definition of the term "profession" has not been adequate. Rather, he discusses professionalization as a dynamic conception, stating that an approach first enunciated in the 1960s called for new application of the criteria long associated with professions. Each criterion sets a standard that may be considered in either static or dynamic terms. For clarity of communication, he calls absolute criteria

"canons" and dynamic ones "characteristics". A canon might be "a profession must have a clearly formulated code of ethics," while a characteristic might be "a professionalizing occupation should be concerned with the continuing refinement of the ethical standards that characterize its work." He states that characteristics, by their dynamic nature, may take the form of goals. Thus the study of process replaces the identification of essentials in defining professions. Houle further states that a dynamic approach to professionalization is desirable because it permits an open rather than a closed system of thought. (Houle, 1980)

Houle defines fourteen characteristics broadly associated with the professionalization process as bases or the goals of lifelong professional education.

1. As many members as possible of a professionalizing vocation should be concerned with clarifying its defining function(s)—the conceptual characteristic.

The second, third, and fourth characteristics of professionalization are so intimately related that distinctions among them often overlap in both theory and practice. They are what Houle calls the performance characteristics.

2. Mastery of theoretical knowledge--practitioners of a vocation should seek mastery of at least the rudiments of information and theory.
3. Capacity to solve problems--practitioners of a vocation should seek to be able to use theoretical bodies of knowledge to deal confidently with the category of specific problems.
4. Use of practical knowledge--practitioners should have available to them and actually use a substantial body of knowledge and technique that has grown out of the nature, history, scope, and processes of the vocation's practical application.
5. Self-enhancement--practitioners of a vocation should, throughout their years of pre-service learning and work, seek new personal dimensions of knowledge, skill, and sensitiveness by the arduous study of topics not directly related to their occupation.

The remainder of Houle's list is comprised of collective identity characteristics. The professionalizing occupations are distinctive from other vocations because their leaders seek to encourage and regulate standards of practice based on a profound central mission and on advanced esoteric bodies of knowledge.

6. Formal training--formal procedures should be established to transmit the essential body of knowledge and technique of the vocation to all recognized practitioners before they enter service and throughout their careers.
7. Credentialing--formal means should be used to test the capacity of individual practitioners to perform their duties at an acceptable level and, in some cases, to license those who are qualified to do so.
8. Creation of a subculture--the vocation should nurture for its members a subculture with distinctive attributes: lore, folkways, mores, traditions, role differentiations and relationships; variations in authority and power; personal prestige systems; language and special references; and clusterings of people with distinctive functions.
9. Legal reinforcement--legal support or formal administrative rulings should protect the special rights and privileges of practitioners.
10. Public acceptance--the general public should be encouraged to become aware of the lofty character of the work done by practitioners of the vocations.
11. Ethical practice--a tradition of ethical practice, sometimes reinforced by a formal code, should be established and then constantly refined in the light of changing circumstances.
12. Penalties--penalties (including the ultimate, denial of the right to practice) should be established and enforced for those practitioners who are incompetent or who fail to act in terms of accepted ethical standards.
13. Relations to other vocations--the relationship of the work of the vocations' practitioners and that of the members of allied occupations should be clearly established and maintained in practice.
14. Relations to users of service--formal relationships between practitioners of the vocation and people who use their services should be clearly defined.

None of these characteristics can ever be completely and finally achieved, Houle says. Hence the "race for professional accomplishment" has "no finish line". (Houle, 1980)

While it is apparent that, at this time, no clear definition of a profession has gained universal acceptance, the issue is a timely one.

Selection of Professions and Occupations

The selection of professions and occupations for this study is an inclusive, rather than exclusive, process. Fields are selected on the basis of several criteria, with the option of making further additions always remaining open; it is expected that other professions and occupations will yet be added to those included in this report. Indeed, it is a goal of the study to address as many professions and occupations as are relevant.

Professions and occupations selected for inclusion meet one or more of the following criteria:

1. Individuals must obtain legal permission to practice the profession or occupation in Pennsylvania.
2. Professional organization(s) or association(s) certify or formally recognize attainment of a level of competence by an individual.
3. There is a registry maintained for individuals considered qualified to practice the profession or occupation.
4. Higher education is generally necessary for practice of the profession or occupation.
5. The Pennsylvania State University has a preprofessional or professional program in the field of study indicated by the profession or occupation.
6. The Continuing Education program at The Pennsylvania State University has provided educational services for, or worked with, the profession or occupation.
7. The profession or occupation was recommended for inclusion by a faculty or staff member at The Pennsylvania State University.

Reference was made to the earlier report by Nead, and also to two summaries of legally regulated occupations within Pennsylvania (Angel, 1970; Pennsylvania Laws, Statutes, etc., 1968) in identifying those professions and occupations for which legal permission to practice is required in Pennsylvania. Discussions with the assistant or associate deans for Continuing Education in each of the colleges of The Pennsylvania State University also produced a number of suggested professions and occupations which were reviewed in terms of the criteria stated above.

The allied health professions required special consideration. Since there are almost 600 recognized allied health professions, it obviously was not practical to consider including all, or even most, of them. Identification of those to be addressed was accomplished in consultation with the Office of the Dean for Allied Health Programs at The Milton S. Hershey College of Medicine of The Pennsylvania State University. Numbers of practitioners within Pennsylvania and the amount of education required or preferred for each of the professions were factors considered in selecting the allied health professions.

Full summaries have been prepared for sixty-eight professions and occupations, and briefer synopses on nine additional fields are included. Those professions and occupations selected for synopses meet the criteria stated above, but are reported here in an abbreviated form because they either are represented by only a small number of practitioners within Pennsylvania or, as an emerging field, they lack uniform credentials.

The professions and occupations included in the study to date are:

*Actuarial Science
Applied Computer Science

*These fields are described in the Synopses beginning on Page 257.

- Architecture
- *Athletic Coaching
 - Athletic Training
 - Bank Management
- *Career Counseling
 - Child Day Care
 - Chiropractic
 - Clergy
 - College Student Personnel Services
 - Communication Disorders
 - Criminal Justice
 - Corrections
 - Law Enforcement
 - Probation and Parole
- *Dental Assisting
 - Dental Hygiene
 - Dentistry
 - Dietetics
 - Education
 - Elementary and Secondary School Counseling
 - Instructional Media Specialists
 - Public School Teaching
 - School Administrators
 - School Psychologists
 - Emergency Medical Technology
 - Engineering
- *Financial Analysis
 - Forestry
 - Funeral Direction
- *Health Planning
 - Health Services Administration
 - Insurance
 - Interior Design
 - Landscape Architecture
 - Law
 - Library Science
 - Marketing
- *Marriage and Family Therapy
 - Medical Records
 - Medical Technology
 - Medicine
 - Doctor of Osteopathic Medicine
 - Medical Doctors
- *Mental Health Counseling
- *Municipal Clerks
 - Municipal Government Management
 - Nursing
 - Certified Registered Nurse Anesthetists
 - Certified Registered Nurse Practitioners
 - Licensed Practical Nurses
 - Nurse Midwives
 - Registered Nurses

Nursing Home Administration
Occupational Therapy
Optometry
Personnel Management
Pharmacy
Physical Therapy
Physician Assistants
Podiatry
Private Security
Psychology
Public Accounting
Radiologic Technology
Real Estate
Recreation and Parks
Rehabilitation Counseling
Respiratory Therapy
Sanitarians
Secretarial Practice
 Certified Professional Secretaries
 Legal Secretaries
 Medical Assistants
Security Sales
Social Work
Surveying
Transportation and Logistics
Travel Agents
Urban and Regional Planning
Veterinary Medicine

Methodology of the Ongoing Study

As each profession or occupation is selected for either a full summary or a synopsis, copies of laws governing its practice within Pennsylvania are obtained, and information from professional associations at both state and national levels also is gathered. Individuals from the following areas are identified and subsequently interviewed:

1. Education. Wherever possible, a Pennsylvania State University faculty member teaching and/or doing research in the field is contracted. In many cases faculty members are serving on state or national regulatory boards or as officers in state or national professional associations, and are particularly well-versed and helpful.

2. Regulatory Agencies. In all cases where legal regulation exists, the regulatory agency is contacted. In many cases the spokespersons for these groups provide substantial amounts of information and verification of data.
3. Professional Associations. State and/or national professional associations are contacted so that their perception of attitudes and trends can be obtained. Many of these groups include an education or continuing education director who serves as an excellent source of information.
4. Practitioners. Individuals engaged in day-to-day practice of an occupation or profession provide a different perspective than any of the above sources.

Because each profession or occupation is somewhat unique in its organization and operation, adoption of a standard procedure for collecting information and contacting individuals is not practical. However, an attempt is made to be as thorough as possible, and all suggested approaches are explored.

Potential resource persons are identified from among those contacted. The individuals selected as resource persons are active in the practice, teaching, regulation, or organization of their profession or occupation; willing and able to provide information for the study; and willing to serve as contacts for continuing educators investigating program development ideas.

Information gleaned from available material is outlined prior to interviewing each resource person. This is done to provide the interviewer(s) with background information and to allow the resource person to verify the interviewer's understanding of the information.

Upon completion of all interviews for a given profession or occupation, a summary is drafted and sent to each person interviewed for his or her review.

The information included in this report is updated continuously. As resource persons become aware of changes within their fields, these changes

are made in the summary for that field, and an annual review of all professions and occupations addressed has been implemented. This process is greatly facilitated by the use of computerized information storage and retrieval systems.

Interview Format

An informal interview protocol has been developed because the variety in organization and operation of professions and occupations noted earlier makes a rigidly defined format impractical. However, the following topics are covered in each interview as applicable.

- I. Review of information regarding legal regulation in Pennsylvania
 - A. Regulatory agency and law
 - B. Requirements for entry into practice
 1. Education
 2. Experience
 3. Examination
 4. Other
 - C. Requirements for continued practice
 1. General
 2. Continuing education
 - a. Existing
 - b. Proposed
 - D. Trends and attitudes toward regulation
 1. State
 2. National
 - E. Anticipated changes in regulation
- II. Development and organization of the profession or occupation
 - A. Historical perspective
 - B. Education available
 1. Institutions
 2. Types of programs
 - C. Supply and demand of practitioners
 - D. Careers pursued by practitioners

E. Trends within the field

1. Education
2. Diversification
3. Attitudes

F. Professional associations

1. National, state, and local
2. Benefits of membership
 - a. Educational opportunities
 - b. Lobbying
 - c. Other

III. Climate for continuing education

- A. Existing practices and providers
- B. Need for programs
- C. Trends for the future

IV. Other information

DISCUSSION

Widespread concern regarding the definition and maintenance of individual practitioners' competency has become an issue across the nation and across professions. This emphasis has led many states to institute or increase requirements for individuals to enter and remain in professional and occupational practice.

The value of mandatory continuing education as a means of maintaining competency was debated extensively over the last decade (Forni, 1975; Kalman, 1976; Pottinger, 1977; Shimberg and Roederer, 1978; Talbott, 1979). At this time, mandatory continuing education does not have widespread support across professions. However, voluntary continuing education is recognized as a potentially useful tool in competency maintenance. Many professional groups encourage voluntary participation in continuing professional education to prevent obsolescence.

The Growth of Practice Regulation

In the strictest sense, "practice regulation" denotes a form of legal, mandatory regulation. However, in a broader sense the term can be expanded to include voluntary regulation as well. This study addresses both mandatory and voluntary regulation, since both have implications for continuing professional education.

In reviewing various forms of regulation, one finds the terms "certification," "licensure," and "registration" used frequently. For general usage they can be defined as:

Licensure: A process by which a government agency grants an individual legal permission to practice a specific profession.

Certification: A process by which a professional organization or association formally recognizes attainment of a level of professional competency by an individual.

Registration: A process by which a nongovernmental agency or organization identifies an individual by including his or her name in a roster of professional practitioners.

These terms often are used interchangeably, however, so that a given profession or occupation may apply its own definition to the term(s) it employs. In the discussion of each profession, the terms are utilized according to common usage in that profession.

Traditionally practice regulation was imposed only in those fields where it was deemed necessary to protect the health and welfare of the public. Once a license or certificate was issued it was considered to be good for the lifetime of the practitioner, fostering acceptance of the philosophy that a person entering a given field possessed lifelong competence in that area (Shimberg, 1977; Kalman, 1979). While this philosophy may have been considered reasonable in a time when the body of knowledge in any given field was small and slow-growing, most professions and occupations consider it quite impractical today. New knowledge currently is being generated at an unprecedented rate, raising very real, serious, questions about the requirements both to enter and to remain in professional practice.

The knowledge explosion and the definition of more, and more specific, fields, have spawned a proliferation of professional regulations, primarily in response to the desire of practitioners, consumers, and state governments to protect the public from incompetent operators. The entire issue of the need for and justifiability of professional regulation has become a controversial one (Gross, 1978; Roederer, 1979; Zerlaut, 1975). How a person gets into a field and stays there has become an area of conflict within individual professions and between practitioners and the public (Frandsen, 1975). The question of who should have how much control has been asked repeatedly (Jacobs, 1979).

An early approach to controlling for at least a minimal level of competence was accreditation of professional and occupational schools. Later, licensing of individual practitioners was adopted to effect further control in a number of fields. In fields where licensure was not adopted, or as a supplement to legal regulation, many professional associations instituted voluntary certification of their members to formally recognize attainment of a specific level of competence. Most recently, a number of professions and occupations have added continuing education as a relicensure or recertification requirement (Watkins, 1979), and a number of professional associations also have instituted a continuing education requirement as a condition for membership.

The use of continuing education as a means of updating professionals, enabling them to maintain an acceptable level of competence and avoid obsolescence, is still in the developmental stage. It is extremely difficult to establish evidence of a relationship between an individual's participation in continuing education and his or her increased knowledge, to say nothing of competence (Kalman, 1976; Shimberg and Roederer, 1978). One study that attempted to get at this issue studied the relationship between "measurable job performance" of engineers and their continuing education participation, finding a positive relationship between the two factors (Morris, 1978). Eight continuing medical education studies also reported significant changes in clinical behavior as a result of well organized learning programs (Illinois Council on Continuing Medical Education, 1980).

These efforts have been beneficial. However, a great deal more work is needed to answer the myriad questions regarding the relationship between continuing professional education and competent practice. Despite these reservations, a number of professional associations, individual practitioners, licensing bodies, and educators strongly believe that appropriate continuing professional education offers an individual the best opportunity to keep

abreast of current knowledge in a given field. It is perhaps this development that has recently produced the greatest impact on higher education and its relationship to professional practice requirements.

A Summary of Professional and Occupational Regulations in Pennsylvania

Within the Commonwealth of Pennsylvania, as across the nation, professional regulation is increasing gradually. Groups that previously have had no regulation are initiating requirements for entry into practice. Those professions and occupations already featuring regulation for initial practice are adding requirements for continued practice. A continuing education requirement is frequently the next component added. And, either in addition or as an alternative to legal regulation, many groups are instituting or expanding forms of voluntary credentialing.

The following chart summarizes professional and occupational regulation in Pennsylvania for the seventy-seven professions addressed. It is divided into two sections, one dealing with mandatory requirements for practice and the other with voluntary certification, designation, or membership.

Table 1
PROFESSIONAL AND OCCUPATIONAL REGULATION IN PENNSYLVANIA

Profession or Occupation	Mandatory Requirements for Practice			Voluntary Certification, Designation, or Membership		
	Initial Credentialing	Recredentialing	Continuing Education Requirement	Initial Credentialing	Recredentialing	Continuing Education Requirement
*Actuarial Science				X		
Applied Computer Science				X		
Architecture	X	X				
*Athletic Coaching						
Athletic Training				X	X	X
Bank Management						
*Career Counseling				X	X	X
Child Day Care Personnel	X					
Chiropractic	X	X				
Clergy						

* These fields are described in the Synopses beginning on page 257.

Table 1 (cont'd)
PROFESSIONAL AND OCCUPATIONAL REGULATION IN PENNSYLVANIA

Profession or Occupation	Mandatory Requirements for Practice			Voluntary Certification, Designation, or Membership		
	Initial Credentialing	Recredentialing	Continuing Education Requirement	Initial Credentialing	Recredentialing	Continuing Education Requirement
College Student Personnel Services						
Communication Disorders	X			X	X	X
Criminal Justice: Corrections	X					
Criminal Justice: Law Enforcement	X					
Criminal Justice: Probation and Parole						
Dental Assisting				X	X	X
Dental Hygiene	X	X	X***			
Dentistry	X	X		X**		
Dietetics				X	X	X

* These fields are described in the Synopses beginning on page 257.

** Indicates specialty certification.

*** Continuing education required for relicensure only if the applicant has not been engaged in active practice for ten or more years.

Table 1 (cont'd)
PROFESSIONAL AND OCCUPATIONAL REGULATION IN PENNSYLVANIA

Profession or Occupation	Mandatory Requirements for Practice			Voluntary Certification, Designation, or Membership		
	Initial Credentialing	Recredentialing	Continuing Education Requirement	Initial Credentialing	Recredentialing	Continuing Education Requirement
Education: Elementary and Secondary School Counseling	X	X				
Education: Instructional Media Specialists	X	X				
Education: Public School Teaching	X	X				
Education: School Administrators	X	X				
Education: School Psychologists	X	X				
Emergency Medical Technology				X	X	
Engineering	X	X				
*Financial Analysis				X	X	

* These fields are described in the Synopses beginning on page 257.

Table 1 (cont'd)
PROFESSIONAL AND OCCUPATIONAL REGULATION IN PENNSYLVANIA

Profession or Occupation	Mandatory Requirements for Practice			Voluntary Certification, Designation, or Membership		
	Initial Credentialing	Recredentialing	Continuing Education Requirement	Initial Credentialing	Recredentialing	Continuing Education Requirement
Forestry						
Funeral Direction	X	X				
*Health Planning						
Health Services Administration				X	X	X
Insurance: Agents and Brokers	X	X				
Interior Design				X	X	
Landscape Architecture	X	X				
Law	X	X				
Library Science	X					
Marketing				X	X	
*Marriage and Family Therapy				X		

* These fields are described in the Synopses beginning on page 257.

Table 1 (cont'd)

PROFESSIONAL AND OCCUPATIONAL REGULATION IN PENNSYLVANIA

Profession or Occupation	Mandatory Requirements for Practice			Voluntary Certification, Designation, or Membership		
	Initial Credentialing	Recredentialing	Continuing Education Requirement	Initial Credentialing	Recredentialing	Continuing Education Requirement
Medical Records				X	X	X
Medical Technology				X	X	X
Medicine: Doctor of Osteopathic Medicine	X	X	X	X**	X	X
Medicine: Medical Doctors	X	X	X	X**	X	X
*Mental Health Counseling				X	X	X
*Municipal Clerks				X		
Municipal Government Management						
Nursing: Certified Registered Nurse Anesthetists	X	X	X			
Nursing: Certified Registered Nurse Practitioners	X	X				

* These fields are described in the Synopses beginning on page 257.

** Indicates specialty certification.

Table 1 (cont'd)
PROFESSIONAL AND OCCUPATIONAL REGULATION IN PENNSYLVANIA

Profession or Occupation	Mandatory Requirements for Practice			Voluntary Certification, Designation, or Membership		
	Initial Credentialing	Recredentialing	Continuing Education Requirement	Initial Credentialing	Recredentialing	Continuing Education Requirement
Nursing: Licensed Practical Nurses	X	X				
Nursing: Nurse Midwives	X	X				
Nursing: Registered Nurses	X	X				
Nursing Home Administration	X****	X	X			
Occupational Therapy				X	X	
Optometry	X	X	X			
Personnel Management				X	X	
Pharmacy	X	X				
Physical Therapy	X	X				
Physician Assistants	X	X	X			

**** In some cases, continuing education is specifically required for initial credentialing.

Table 1 (cont'd)

PROFESSIONAL AND OCCUPATIONAL REGULATION IN PENNSYLVANIA

Profession or Occupation	Mandatory Requirements for Practice			Voluntary Certification, Designation, or Membership		
	Initial Credentialing	Recredentialing	Continuing Education Requirement	Initial Credentialing	Recredentialing	Continuing Education Requirement
Podiatry	X	X	X			
Private Security				X	X	X
Psychology	X	X				
Public Accounting	X	X	X	X		
Radiologic Technology				X	X	
Real Estate: Salesmen and Brokers	X	X				
Recreation and Parks Personnel				X	X	X
Rehabilitation Counseling				X	X	X
Respiratory Therapy				X	X	
Sanitarians				X	X	
Secretarial Practice: Certified Professional Secretaries				X		

Table 1 (cont'd)
PROFESSIONAL AND OCCUPATIONAL REGULATION IN PENNSYLVANIA

Profession or Occupation	Mandatory Requirements for Practice			Voluntary Certification, Designation, or Membership		
	Initial Credentialing	Recredentialing	Continuing Education Requirement	Initial Credentialing	Recredentialing	Continuing Education Requirement
Secretarial Practice: Legal Secretaries				X		
Secretarial Practice: Medical Assistants				X	X	
Security Sales	X	X		X	X	
Social Work				X		
Surveying	X	X				
Transportation and Logistics				X	X	X
Travel Agents				X	X	
Urban and Regional Planning				X	X	
Veterinary Medicine	X	X	X			

The information collected shows that there is a large and growing number of professions and occupations indicating needs for continuing professional education. While higher education can go a long way toward meeting continuing professional education needs, optimum continuing professional education can be achieved only through a collaborative effort that includes professional associations, licensing boards, practitioners, educators, and other institutions of higher education. Colleges and universities have the educational capabilities and subject matter expertise, and it is in these institutions that new knowledge most frequently comes to light. However, the college or university alone cannot identify the problems and the educational needs of practitioners in a given field.

Several types of continuing education target audiences can be identified from the study, and include professions and occupations for which:

1. Continuing education is required to maintain credentialing mandatory for continued practice, as indicated in Table 1.
2. Continuing education is required to maintain voluntary credentialing, as indicated in Table 1.
3. Continuing education is required for initial mandatory credentialing. As shown in Table 1, this condition exists in only one field at this time.
4. Continuing education participation is voluntary but regarded as advantageous. The majority of professions and occupations reviewed are in this category.
5. Continuing education courses may be used to meet some or all of the educational requirements for initial mandatory credentialing. For example, the educational requirement for licensing as a real estate agent may be met through successful completion of continuing education courses, although continuing education is not specifically required.
6. Continuing education courses may be used to meet some or all of the educational requirements for initial voluntary credentialing. Emergency medical technology is an example of a field in which the required education often is obtained through participation in continuing education.

7. The educational institution cannot provide continuing professional education, but can offer programs in related areas or for personal development or community service.

Table 2 provides a summary of continuing education requirements and program approval procedures for those professions and occupations which require continuing education for maintenance of either mandatory or voluntary credentialing. It also includes information on four occupations for which completion of an approved continuing education program can qualify an individual for initial credentialing.

Table 2

**SUMMARY OF CONTINUING EDUCATION REQUIREMENTS AND PROGRAM APPROVAL PROCEDURES FOR
SELECTED PROFESSIONS AND OCCUPATIONS IN PENNSYLVANIA**

<u>Profession or Occupation</u>	<u>Continuing Education Requirements</u>	<u>Acceptable Educational Activities</u>	<u>Approval Mechanism</u>	<u>For Additional Information Contact</u>
Athletic Training Voluntary certified membership in National Athletic Trainers Association (NATA)	6 CEUs every three years to maintain certified NATA membership	acceptable activities include postgraduate study, workshops, seminars, NATA-sponsored activities	district representatives on NATA's Board of Continuing Education will grant prior approval	National Athletic Trainers Association 1001 E. 4th Street Greenville, NC 27834 (919) 752-1725
Dental Assisting Voluntary certification provided by Dental Assisting National Board (DANB)	one recertification option involves obtaining 12 hours every year	specified activities including formal programs, reading, and community participation	DANB grants prior approval	Dental Assisting National Board 666 North Lake Shore Drive Suite 1136 Chicago, IL 60611 (312) 642-3368
Dentistry Voluntary membership in Academy of General Dentistry	75 hours every three years to maintain Academy membership	acceptable activities include scientific programs related to dentistry	Academy will grant a five-year continuous membership or approval for instructors who teach courses directly related to dentistry	Academy of General Dentistry 211 East Chicago Avenue Chicago, IL 60611 (312) 440-4300
Dietetics Voluntary registration provided by American Dietetic Association (ADA)	75 hours every five years to maintain Registered Dietician status	acceptable activities include meetings, workshops, and courses	ADA will give prior approval four weeks before program is held; approval following program also is possible	American Dietetic Association 430 North Michigan Avenue Chicago, IL 60611 (312) 280-5000

Note: Professions and occupations selected are those requiring continuing education for maintenance of credentialing, or those for which completion of an approved continuing education program can qualify an individual for initial credentialing. They are chosen from Professional and Occupational Practice Requirements (3rd edition) by Queensy, Hanniford, and Dunn (University Park: The Pennsylvania State University, 1984).

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<u>Profession or Occupation</u>	<u>Continuing Education Requirements</u>	<u>Acceptable Educational Activities</u>	<u>Approval Mechanism</u>	<u>For Additional Information Contact</u>
Education: Public School Teaching Permanent certification through Pennsylvania Department of Education (PDE)	24 hours of post-baccalaureate credits or approved in-service credits to earn permanent certification; permanently certified teachers need no further continuing education	postbaccalaureate credit coursework or approved in-service courses	PDE must approve in-service courses	Pennsylvania Department of Education Bureau of Certification P. O. Box 911 333 Market Street Harrisburg, PA 17106 (717) 787-2967 Network: 447-2967
Emergency Medical Technology Voluntary certification provided by Pennsylvania Department of Health	minimum of 120 clock hours of approved training required to become certified; recertification may necessitate refresher course averaging 30 hours if challenge test is failed	approved training must include patient assessment, basic life support, oxygen administration, and care of fractures	Division of Emergency Health Services, Pa. Department of Health, must approve training program; Penn State offers approved program	Division of Emergency Health Pennsylvania Department of Health P. O. Box 90 Harrisburg, PA 17108 (717) 787-8740 Network: 447-8740
Insurance Mandatory agent and broker's licenses issued by State	one method of obtaining broker's license is to complete an educational program if it has received informal approval from the Department of Insurance	program may be approved informally by the Department of Insurance	description of educational program must be submitted to Department of Insurance	Commonwealth of Pennsylvania Department of Insurance Room 1345, Strawberry Square Harrisburg, PA 17120 (717) 789-3840 Network: 447-3840
Legal Assistants (Paralegals) Voluntary certification provided by National Association of Legal Assistants (NALA)	one method of obtaining certification includes completing approved training program; 5 CEUs needed every 5 years to maintain certification	program must be approved by the American Bar Association (ABA) to be considered an "approved" program for initial certification through NALA. Acceptable activities for NALA recertification must be distributed within specified categories, including coursework and seminars.	ABA provides a final five-year approval if the program has been operating for at least two years, and a provisional approval if the program has been in operation for one year; approval follows completion of a self-evaluation report and on-site visit by an evaluation team.	American Bar Association 750 N. Lake Shore Drive Chicago, IL 60611 (312) 988-5000
Medical Records Voluntary credentialing provided by American Medical Record Association (AMRA)	30 hours every two years for Registered Record Administrators; 20 hours every two years for Accredited Record Technicians	association meetings, seminars, workshops, and individual study	AMRA grants voluntary prior approval to sponsoring organizations at least 30 days prior to workshop; individuals keep own record of hours and submit summary form at end of certification period	American Medical Record Association 875 N. Michigan Avenue Chicago, IL 60611 (312) 787-2672

<u>Profession or Occupation</u>	<u>Continuing Education Requirements</u>	<u>Acceptable Educational Activities</u>	<u>Approval Mechanism</u>	<u>For Additional Information Contact</u>
Medical Technology Voluntary registration available through National Certification Agency for Medical Laboratory Personnel (NCA)	one method of maintaining NCA registration involves obtaining 4 CEUs every two years	specified activities, including seminars and workshops	university-sponsored programs have automatic approval	National Certification Agency for Medical Laboratory Personnel 1725 Desales St., NW, Suite 403 Washington, D.C. 20036 (202) 429-0149
Medicine: Doctor of Osteopathic Medicine License renewal requirements include maintaining malpractice insurance	150 hours every three years to maintain required malpractice insurance	60 hours must be Category 1, which includes programs sponsored by recognized osteopathic institutions and organizations	AOA will grant "initial" approval but generally credit is granted on individual basis if program meets approval criteria; both prior and post-program approval are possible	American Osteopathic Association (AOA) 212 E. Ohio Street Chicago, IL 60611 (312) 280-5800
Medicine: Medical Doctor License renewal requirements include maintaining malpractice insurance	150 hours every three years to maintain required malpractice insurance	at least 60 hours must be Category 1 (AMA or FMS accredited sponsorship); remainder can be other specified activities	AMA and FMA can accredit organizations sponsoring continuing medical education programs	American Medical Association (AMA) 535 North Dearborn Street Chicago, IL 60610 (312) 643-5000 Pennsylvania Medical Society (FMS) 20 Erford Road Lancaster, PA 17043 (717) 763-7151
Mental Health Counseling Voluntary certification provided by National Academy of Certified Clinical Mental Health Counselors (NACCMHC)	150 hours every five years to maintain NACCMHC certification	educational activities must be competency based	programs are not approved; individual submits transcript for review and approval	National Academy of Certified Clinical Mental Health Counselors 10700 62nd Street Temple Terrace, FL 33617
Nursing: Certified Registered Nurse Anesthetist Mandatory certification provided by American Association of Nurse Anesthetists (AANA)	40 hours every two years to maintain State-required AANA certification	acceptable activities include seminars, refresher courses, in-service, and approved research and independent study	AANA encourages obtaining approval at least 3 months prior to program; however, subsequent approval is possible if program meets approval criteria or has been approved by another accrediting agency	American Association of Nurse Anesthetists 216 Higgins Road Park Ridge, IL 60068 (312) 692-7050

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<u>Profession or Occupation</u>	<u>Continuing Education Requirements</u>	<u>Acceptable Educational Activities</u>	<u>Approval Mechanism</u>	<u>For Additional Information Contact</u>
Nursing Home Administration Mandatory licensure through the State	48 hours every two years to maintain license	regulations specify distribution of hours in variety of activities	Board will grant prior approval to programs; individuals also can receive approval for acceptable activities	State Board of Examiners of Nursing Home Administrators P. O. Box 2649 Harrisburg, PA 17120 (717) 783-1308 Network: 443-1308
Optometry Mandatory licensure through the State	24 hours every two years to maintain current license	specified activities including seminars	Board grants prior approval to programs and asks that such approval be requested at least 30 days in advance of program	State Board of Optometrical Examiners P. O. Box 2649 Harrisburg, PA 17120 (717) 783-1308 Network: 443-1308
Personnel Management Voluntary certification provided by Personnel Accreditation Institute (PAI)	6 CEUs every three years is one option for maintaining PAI certification	acceptable activities include seminars, courses, teaching, publishing, and research	programs are not approved; individual's participation in program is approved, usually upon completion of program	Personnel Accreditation Institute P. O. Box 19648 Alexandria, VA 22320 (703) 684-8327
Physician Assistants Mandatory certification provided by National Commission on Certification of Physician Assistants (NCCPA)	100 hours every two years to maintain required NCCPA certification	minimum of 40 hours in Category I—programs which have been approved by AAPA, AMA, FMS, American Association of Family Practice (AAFP), or American College of Surgeons (ACS); remainder can be other specified activities	AMA, FMS, AAFP, and ACS accredit sponsoring organizations; AAPA requires prior approval 60-90 days before program occurs; approval also is possible up to one year after program occurs	National Commission on Certification of Physician Assistants 3324 Peachtree Road, Northeast, Suite 560 Atlanta, GA 30326 (404) 261-1261 American Academy of Physicians Assistants (AAPA) 1117 N. 19th Street Suite 300 Arlington, VA 22209 (703) 525-4200
Podiatry Mandatory licensure through the State	16 hours every two years to renew license	approved seminars, discussions, or other group learning situations	Board grants prior approval; January-June programs should be submitted by October 1; July-December programs by March 1	State Board of Podiatry Examiners P. O. Box 2649 Harrisburg, PA 17120 (717) 783-1389 Network: 443-1389
Private Security Voluntary certification provided by American Society for Industrial Security	6 "professional credits" must be accumulated every three years; credit or noncredit courses or programs are one type of credit	conferences or conventions, or courses from accredited institutions	no approval procedures	American Society for Industrial Security 1635 North Fort Myer Drive Suite 1200 Arlington, VA 22209 (703) 522-5500

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<u>Profession or Occupation</u>	<u>Continuing Education Requirements</u>	<u>Acceptable Educational Activities</u>	<u>Approval Mechanism</u>	<u>For Additional Information Contact</u>
Public Accounting Mandatory practice permit issued by State	80 hours every two years to maintain required practice permit	variety of specified activities, including at least 32 hours of accounting and 16 hours in tax subjects	activities must be deemed acceptable by the Board; approval is given to individuals on basis of submitted information and verification	State Board of Examiners of Public Accountants P. O. Box 2649 Harrisburg, PA 17120 (717) 783-1404 Network: 443-1404
Real Estate Mandatory salesperson and broker licenses issued by State	60 hours of real estate instruction needed to obtain salesperson's license; 240 hours needed to obtain broker's license	educational programs must be approved by the State Real Estate Commission	Commission grants blanket approval to educational institutions on the basis of specified criteria, including course outlines; Penn State offers approved real estate educational program	State Real Estate Commission P. O. Box 2649 Harrisburg, PA 17105 (717) 783-3658 Network: 443-3658
Recreation and Parks Voluntary certification provided by the Pennsylvania Recreation and Park Society (PRPS)	2 CEUs or equivalent academic coursework every two years to remain certified	PRPS's Professional Certification Board approves CEUs of individual practitioner	no prior approval process currently exists	Pennsylvania Recreation and Park Society, Inc. 723 S. Atherton Street State College, PA 16801 (814) 234-4272
Rehabilitation Counseling Voluntary certification provided by Commission on Rehabilitation Counselor Certification (CRCC)	150 hours every five years to maintain CRCC certification	specified activities, including seminars and workshops	University programs which meet the requirements of number of hours, credit, and accreditation do not need CRCC approval; individuals can obtain approval before or after program occurs	Commission on Rehabilitation Counselor Certification 1156 Shure Drive Arlington Heights, IL 60004 (312) 394-2104
Transportation and Logistics Voluntary certification for purchasing managers offered by the National Association of Purchasing Management (NAPM)	6 "points" must be accumulated every five years in order to remain certified	variety of educational activities and professional association contributions	prior program approval is available on voluntary basis	National Association of Purchasing Management, Inc. P. O. Box 418 496 Kinder Kamack Road Oradell, NJ 07649 (201) 967-8585
Veterinary Medicine Mandatory licensure through the State	8 hours every two years to renew license	approved educational programs	Board grants prior approval	State Board of Veterinary Medical Examiners P. O. Box 2649 Harrisburg, PA 17120 (717) 783-7155 Network: 443-7155

Implications for Continuing Higher Education

The role of universities in professional education was well defined by Wilhelm von Humboldt when he established The University of Berlin in 1810. He envisioned the core of the university as the scholarly scientific and philosophical disciplines, surrounded by professional schools reaching out to the world of practice. Professional preparation included the student's passage through the university core of basic disciplines and into the professional school of specialization. This pattern has been adopted within the last century in this country as a model for preparing physicians, lawyers, and countless other professional and occupational practitioners.

Von Humboldt also expected the professions to feed back into the university the problems they encountered in the course of practice. The university-based disciplines then would address these issues through research and teaching, and transmit the results to practitioners. To date this segment of von Humboldt's plan has not materialized to the extent that it might have in this country. In light of the current emphasis on continuing professional education, however, the challenge to make it work is very real.

Virtually every profession and occupation investigated in this study has indicated support of some form of continuing education for its practitioners. Whether voluntary or mandatory, continuing professional education is viewed as a useful means of accomplishing a number of professional goals, as expressed by the trends observable in the professions and occupations studied.

Most policies governing professional and occupational practice are developed at the state level, but they often have their bases in national concepts. Thus, while educational institutions need to address the regulations within the state(s) they are serving (Knox, 1979), they also should realize that many of the policies transcend state borders. Professional "philosophies" frequently come down from the national level and are translated

into regulations, attitudes, and trends that prevail in a number of states or even through the country.

While continuing professional education for some time has been considered a valuable means of obtaining current information in a given field, this study indicates that professional and occupational practitioners also participate in continuing education for a number of other reasons. Professions are encouraging the use of continuing education for the purposes described below.

To Maintain Competency. While opponents of mandatory continuing education argue that continuing education participation is no guarantee of competency, few if any will deny that continuing education provides an opportunity for an individual to gain new knowledge that can be applied to make him or her a more competent practitioner. In some fields, practitioners feel the need for continuing education quite strongly and hence are motivated to participate voluntarily. Professional engineers, for example, cannot maintain a viable practice if their skills become obsolete, and thus are motivated to learn. Continuing higher education needs to find out what new knowledge and skills these professionals need, and to provide the appropriate educational programs. In other fields, mandatory continuing education may be considered desirable to ensure practitioners' participation. Requiring that a practitioner continue learning is intended not only to protect the public, but also to protect the practitioner. For example, in Pennsylvania the insurance field experiences a high turnover of agents, which may be attributed in part to agents' failure to keep up with a constantly changing industry.

To Prepare for Credentialing Examinations. Before maintaining competence becomes an issue, applicants to practice in many fields are required to pass an examination for initial licensure or certification. Continuing professional education courses are frequently of value in preparing individuals to take these examinations. Such courses can not only review information that

has been learned earlier, but also can focus on specific areas covered by the examination or provide practice in taking an examination. For instance, architects have suggested that a course offering practice sessions or a "dry run" for the design portion of their licensing examination would be extremely useful. The high failure rate on this portion of the test is attributed largely to individuals' inability to pace themselves properly in the time allowed.

In some professions, an experience requirement must be met before an individual can sit for the licensing examination. In other professions, an individual must be licensed only if he or she has an independent practice, so someone working in industry, government, or as an educator in the field is exempt from this regulation. However, if this individual should decide to work as a consultant or to set up his or her own business, licensure would be required. In cases such as these, where the licensure examination is taken after a few years of practice rather than directly upon completion of education or training, a review has real merit.

To Qualify for Initial Licensure or Certification. In some cases continuing professional education, perhaps in combination with other factors, may enable an individual to qualify for initial licensure, certification, or registration. Continuing education may be required specifically, or it may be used as a means of meeting more general education requirements. Persons wishing to enter the real estate field, for example, often meet the education requirement by successfully completing courses offered through continuing education. An individual having a degree in a field other than that which he or she wishes to enter may take continuing professional education courses to supplement the degree and meet specific content requirements for practice.

To Update Those Practicing Prior to Regulatory Legislation. In some cases continuing professional education might be desirable for individuals who

were practicing prior to the establishment of regulatory legislation. As states have passed legislation and implemented and revised regulations regarding who may practice in a given field, large numbers of individuals have been covered by "grandfather" clauses. These people, practicing at the time of legislation, are granted licensure or certification without meeting the newly established requirements. Some of them have had very little or no formal education in their field, as has been the case in some states with licensed practical nurses. Such practitioners may find continuing education courses especially beneficial for learning some of the underlying theory and basic concepts central to their fields.

To Provide Education in New Practice Areas. Another consequence of knowledge growth and society's changing needs is the emergence of new practice areas within, or as outgrowths of, existing fields. The law enforcement field, where private security is a growing area, is an example. In this case, the demand for private security personnel is quite significant and is increasing rapidly, but because of the newness of the field there are few persons educated in it. Interested individuals in the law enforcement field could supplement their existing training in the direction of private security through continuing professional education courses.

This concept also has relevance for retraining. As some fields become overcrowded, individuals may elect or be forced to seek employment in other, related fields. This type of adaptation might best be accomplished through continuing education.

To Enhance Job Security and Advancement. A related application of continuing professional education receiving increasing attention is its use to enhance job security and improve opportunities for advancement. A formal degree is required for practice in a majority of professions, and there is a growing trend toward requiring a degree for employment where this has not

previously been the case. This tendency may be viewed as a response to the expansion of knowledge in many fields and the resultant need for more educated practitioners.

In the nursing field, an individual can become a registered nurse through a diploma program or an associate or baccalaureate degree program. There has been a significant amount of discussion regarding the requirement of a baccalaureate education of all new R.N.s in the future. If this materializes, it is not unrealistic to expect that at least some less experienced diploma and associate degree nurses may view it as a threat to their job security and their opportunities for advancement. A similar situation exists in the criminal justice field. There minimum educational requirements for police officers generally include a high school education and completion of a training program, but a baccalaureate degree is seen as a desirable criterion for promotion.

Education beyond that necessary to enter or remain in practice is required to attain certain professional levels or designations in some fields. For example, continuing education may be used to help a real estate agent move up to broker, or to qualify an insurance agent to pursue the Certified Life Underwriter designation.

To Supply Information in Related Areas. Another type of information frequently sought and logically offered through continuing professional education is that dealing with areas related to professional practice but not addressing the specific subject area. This category includes such things as office management for physicians, interpersonal skills for insurance agents, and teaching skills for librarians. Practitioners report that they often need these types of information, but do not get them in the normal course of their education.

To Serve as a Forum for Professional Exchange. Just as practitioners can learn from continuing education courses, they also can learn from each other. In some professions, such as social work and interior design, continuing education programs can provide a forum for the exchange of ideas. By offering a loosely structured workshop keyed to timely topic and problem areas, continuing education can serve as a catalyst, bringing practitioners, educators, and others together to discuss various aspects of an issue or ways of handling a problem.

To Provide Updated General Education. As new insights and knowledge develop in the practical areas of the professions and occupations, so do they evolve in the social sciences, arts, humanities, biological sciences, and physical sciences. Since all professions and occupations are set in this broader context of general education, the need for practitioners to keep abreast of growth in these basic areas is substantial. Continuing education programs within the areas of general education can be fundamental in enabling practitioners to retain a realistic perspective of their field within a changing society.

More and more practitioners in an ever increasing number of professions are requiring, requesting, needing, and wanting supplemental education. Thus, continuing higher education has an opportunity to provide a very real service to large segments of the population. There are opportunities for continuing professional educators to seriously evaluate continuing professional education needs, and to work cooperatively with professional associations, licensing boards, practitioners, and other institutions of higher education in providing the most effective continuing professional education.

SUMMARIES

The following summaries of sixty-eight professions and occupations present information for use by those involved in continuing professional education program development. In addition to outlining the requirements for individuals wishing to obtain mandatory or voluntary credentials, the summaries provide background information on the development of the profession or occupation and material on current trends within the field. A section on the climate for continuing education has been included in each summary to give continuing educators an overview of the group's perceived need for and interest in continuing education programs.

The primary function of the summaries is to assist the continuing educator in identifying those professions and occupations warranting further exploration as continuing professional education target groups. The material included will continue to be expanded and updated.

APPLIED COMPUTER SCIENCE

There is no mandatory certification or licensure of computer professionals in Pennsylvania. However, voluntary national certification for computer programmers and data processing professionals is provided through the Institute for Certification for Computer Professionals (ICCP).

CERTIFICATION INFORMATION

In order to receive a Certificate in Computer Programming (CCP), an individual must:

- I. Successfully complete a CCP examination covering a common core of programming knowledge and one area of specialization.
- II. Pay an examination fee.
- III. Subscribe to the ICCP Codes of Ethics, Conduct, and Good Practice.

In order to receive a Certificate in Data Processing (CDP), an individual must:

- I. Have at least sixty months of full time experience in computer-based information systems. Academic work may substitute for a portion of the experience requirement.
- II. Successfully complete all five sections of the CDP examination which covers data processing equipment, computer programming and software, principles of management, quantitative methods, and systems analysis and design. All sections must be passed within four consecutive testing sessions.
- III. Subscribe to the ICCP Codes of Ethics, Conduct, and Good Practice.
- IV. Pay application, general testing, and specific test section fees.

RECERTIFICATION INFORMATION

There are no provisions for recertification.

Continuing education requirements: none.

BACKGROUND INFORMATION

Computer professionals work in a variety of settings and may have different levels of responsibility and job titles. Rapid changes in technology have led to corresponding changes in occupational titles, and persons performing similar functions may have different titles in various settings. This report will deal exclusively with persons working in applied settings, such as business, science, or engineering in both the private and public sectors. However, computer professionals may also hold administrative, library, or academic positions, design and produce hardware, or work in the areas of computer operations or systems support. Thus, the field is broad and allows advancement through a number of different career paths.

Within the applied setting, the positions of systems analyst, programmer-analyst, and applications programmer are most common, but distinctive intermediate jobs such as systems designer and program designer are emerging.

A systems analyst meets with users of an information system to determine if a computer would be a cost effective tool for solving a particular data or information problem. The analyst is also responsible for conducting a formal user survey, and must be aware of the budget and management information needed for effective decision-making. Although analysts need not know precisely how the user's requirements will translate into specific computer programs, they must have sufficient familiarity with computer systems to know technological trends.

A programmer-analyst communicates between the systems analyst and the programmer. The programmer-analyst attempts to develop systems specifications that anticipate future problems. Persons in this position might communicate with users, but must also have technical information about computer hardware and operating systems and concepts regarding general program design.

Computer programmers transform the systems and program specifications into detailed program design and actual coded programs. They must have considerable knowledge of algorithm development and specific programming languages, and some knowledge of computer architecture. In this position, they respond to instructions from higher level computer personnel and generally are not responsible for overall design.

There are a variety of ways to advance within the computer field, but most persons will have had at least some programming experience. A few basic programming courses are sufficient to obtain a job as a programmer, particularly if there will be close supervision and support as the programmer gains experience. Coursework may be taken through vocational-technical schools, junior or community colleges, associate degree programs, or four-year educational institutions. Advancement into higher levels of responsibility occurs primarily as a result of broader education plus experience and further training. Most persons in design or analyst positions hold college degrees. In addition to technical training, qualities such as logical thinking, time management, and planning ability are important. Persons working in non-business applications usually need additional scientific, engineering, and mathematical background. As computer personnel advance into positions which involve more client contact, communications skills become increasingly necessary. High standards of ethical conduct are crucial at all levels, since computer systems often maintain very sensitive and valuable information.

Penn State offers an associate degree in computer programming at several Commonwealth Campuses. The computer science department at University Park grants baccalaureate, master's, and doctoral degrees in basic computer science theory.

Professionals in the field view CCP or CDP certification as quite unnecessary in terms of obtaining employment, because there is a great demand currently for persons with technical skills. Also, some practitioners feel that the examinations are too broad to reflect specializations within the

computer field. However, certification is viewed by many as a desirable designation, and there are almost 25,000 CCPs and CDPs nationwide out of a total professional workforce of over 450,000.

A variety of professional associations serve the needs of computer personnel. The American Federation of Information Processing Societies includes twelve constituent societies engaged in the design and/or application of computers and information processing systems. Its constituent organizations which relate most directly to the professions described in this report are American Society for Information Science (ASIS), Association for Computing Machinery (ACM), Association for Educational Data Systems (AEDS), Data Processing Management Association (DPMA), and The Institute of Electrical and Electronics Engineers Computer Society, Society for Industrial and Applied Mathematics (SIAM), and the Society for Information Display (SID). An unrelated group, Association for Systems Management (ASM), is organized specifically for systems analysis professionals. These associations operate through local and/or regional chapters rather than state affiliates.

In addition to these organizations, there are user groups which are, in some cases, vendor-sponsored. For example, SHARE and GUIDE are two IBM user groups which meet periodically to discuss common concerns and interests and provide feedback to IBM. College and University Systems Exchange (CAUSE) is not vendor-oriented, and has a focus on applications within higher education settings. The Yourdon User Group (YUG) is composed of persons who utilize Yourdon's systems design methodology.

CONTINUING EDUCATION CLIMATE

The technology explosion perhaps has its greatest effect on persons working in the computer field and has resulted in a real need for professionals to remain current. The extent to which one must understand the technical details of particular computer systems varies with one's job responsibilities. Computer programmers need more updating on detailed knowledge than do systems analysts. The latter would be more likely to need professional development in communications skills and information on systems design.

A variety of providers meet the continuing education needs of computer professionals. Professional associations offer journals and other publications, and the associations and user groups also sponsor seminars, workshops, and annual meetings. Chapter meetings usually include educational components. Hardware and software vendors provide courses that probably are most valuable to programmers, since they cover specific computer usages and techniques. Computer consulting firms and educational institutions are other providers of professional development.

Much of the educational programming currently offered appeals to either entry level programmers or higher level managers or analysts. Programs aimed at mid-level personnel are often provided by consulting firms, and tend to be very expensive. Workshops or courses on state-of-the-art methodology, testing, and design might be useful. Some computer professionals feel that persons at this level are the best target group for continuing education offerings. Systems analysts might benefit from courses in effective writing skills and interviewing techniques.

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ARCHITECTURE

Pennsylvania Architects' Law regulates the practice of architecture in the Commonwealth and provides for the establishment of the State Architects' Licensure Board to work in conjunction with the Commissioner of Professional and Occupational Affairs for the licensing and regulation of architects.

LICENSING INFORMATION

A person may become a registered architect by written examination, reciprocity, or, in special cases, by appearance before the Board.

To become registered by the written Architects' Registration Examination (A.R.E.), an individual must:

I. Reside in Pennsylvania or be employed in Pennsylvania by registered architects who maintain a practice of architecture under a permanent Pennsylvania address.

II. Meet ONE of the following sets of eligibility requirements:

A. Option 1

1. Hold an undergraduate first professional degree in architecture from an accredited school of architecture, and
2. Have three years of experience in the office(s) of registered architects or the equivalent of said experience. In all cases an individual must have a minimum of twelve months of experience after graduation under the supervision of a registered architect.

B. Option 2

1. Hold a master's, Ph.D., or other doctoral degree in architecture from an accredited school of architecture, where said degree is the first professional degree, and
2. Have three years of experience in the office(s) of registered architects or the equivalent of said experience. In all cases, an individual must have a minimum of twelve months of experience after graduation under the supervision of a registered architect.

C. Option 3

1. Hold a first professional accredited degree and hold a master's, Ph.D., or other doctoral degree in architecture, where said degree is the second or advanced professional degree, or have a minimum of twelve months of experience teaching in an accredited school of architecture, and

2. Have two years of experience in the office(s) of registered architects or the equivalent of said experience.

D. Option 4

1. Hold a high school diploma, and
2. Have a total of thirteen years of experience in the office(s) of registered architects or the equivalent of said experience.

E. Option 5

1. Hold a non-architectural degree, and
2. Have earned experience in the office(s) of registered architects or the equivalent of said experience, where said experience will total the five years of educational equivalents needed by accredited school candidates. The duration of experience will vary with educational background.
3. Have an additional three years of experience in the office(s) of registered architects, or the equivalent of said experience.

III. Pay an application fee for EACH examination EACH time that it is taken and retaken.

IV. Pass all nine divisions of the A.R.E. All nine divisions of the examination must be taken together initially. Thereafter, any failed divisions must be retaken together, but those divisions passed need not be retaken.

Registration by reciprocity may be granted to an applicant who holds a National Council of Architectural Registration Board (NCARB) certificate and/or is an architect in another state, territory, or country where, in the judgment of the Board, the qualifications required for registration are equal to those in Pennsylvania, and provided the applicant is not under investigation as a result of an alleged violation of law, or having been found guilty of a violation, has satisfied the penalty imposed. Payment of registration fee is required.

Registration may be granted at the discretion of the Board to an experienced architect who appears before the Board to respond to questions and present examples of his/her work. Payment of a registration fee is required.

Options 4 and 5 of the Eligibility Requirements will be phased out by June, 1989 and all candidates will be required to have an accredited degree or have satisfied educational equivalents in an approved learning setting by that date. Traditional office experience will not qualify for educational equivalence.

RELICENSING INFORMATION

To maintain licensing an individual must pay a biennial renewal fee. An architect who permits his/her registration to lapse must pay a restoration fee, the renewal fee, and a penalty fee for each lapsed month since the reinstatement date. The architect also must send a written affidavit stating that he/she had not practiced architecture in Pennsylvania during the lapsed period. The registration periods extend from July 1 of each year to June 30 two years hence.

Continuing education requirements: none

BACKGROUND INFORMATION

The State Architects' Licensure Board in Pennsylvania maintains membership in NCARB, as do all other state boards. NCARB has no authority or power over the state boards, but generally they receive cooperation and compliance from these boards. The states generally abide by the NCARB rules, and this uniform regulation serves as an aid in developing reciprocity among the states.

A new law regulating the practice of architecture in Pennsylvania was passed in December, 1982. New rules and regulations have been formulated and are being submitted to the Legislature for passage.

The A.R.E. is a national examination that consists of nine divisions: Pre-Design, Site Design, Building Design, Structural Technology-General, Structural Technology-Lateral Forces, Structural Technology-Long Span, Mechanical/Plumbing/Electrical and Life Safety Systems, Materials and Methods, and Construction Documents and Services. The examination is given once a year in Philadelphia and Pittsburgh. The nine examination divisions extend for a total of four days. The Building Design portion of the examination is the longest; candidates are given twelve hours in which to complete one graphic problem.

The failure rate on the Building Design Examination is quite high. Board members attribute this failure rate at least in part to an inability of the applicants to pace their work properly through the twelve-hour examination period. It has been suggested that a preparatory course or "dry run" for the Building Design Examination could be useful in helping applicants overcome this timing problem.

Evaluation of the experience, or work time, of applicants is made by the Board in accordance with the NCARB Table of Equivalents. At least twelve months of the experience must be directly under the supervision of a registered architect after graduation. Summer work while in an accredited school is credited after completion of the first three academic years of schooling. Credit for work with an engineer, contractor, or other person in the design and/or building professions may also be granted at the discretion of the Board at the rate of 50 percent (e.g., one year of credit for two years of work) and for a maximum of two years, but this experience must be combined with twelve months under a registered architect to meet the total experience requirement.

A national internship development program (IDP) has been developed in many states (excluding Pennsylvania), and there are attempts to introduce it

in all states. The IDP insures that a person gains experience in all facets of architecture during his/her work time.

There are approximately 6,000 registered architects in Pennsylvania, about 3,000 of whom are currently residents of the state. The remainder hold licenses but may reside and/or practice outside of Pennsylvania. Penn State graduates an average of thirty-five to forty students in its four-year undergraduate program each year and about twenty to twenty-five students in its professional degree program. A second M.S. and advanced degree is also available at Penn State for holders of a first professional degree in architecture.

The Pennsylvania Society of Architects (PSA), the state association of the American Institute of Architects (AIA), has approximately 1,500 members in six chapters: Philadelphia, Northeastern (Scranton-Wilkes-Barre), Central, Western (Pittsburgh), Northwestern (Erie), and Bucks County. Each chapter holds monthly meetings for lectures, business, and legislation review. The state Society meets yearly for a three-day forum. These forums, held in a different part of the state each year, include educational programs and exhibits by the building industry. PSA has an executive director and an office in Harrisburg, and AIA members are represented by a regional director at AIA in Washington.

CLIMATE FOR CONTINUING EDUCATION

Some type of "live" preparatory course for the Building Design Examination has been recommended. Study guides are available by mail to help applicants prepare, but especially in the case of design this type of instruction appears to fall short of its goal. In other states and in large urban centers there are courses specifically developed to help applicants prepare for the Building Design Examination, and apparently they are beneficial. Some refresher courses are intended to prepare candidates to take the entire A.R.E.

The need for continuing education for architects already registered has been acknowledged by both PSA and AIA. While practitioners are opposed to mandatory continuing education, PSA and AIA feel that if architects do not establish patterns of participation in continuing education of their own volition, they may be forced by outside agencies to adopt continuing education requirements. AIA organizes a significant number of continuing education programs, and also encourages the state societies to develop programs.

The Department of Architecture at Penn State recently assumed responsibility for the organization of continuing education programs for architects in Pennsylvania for PSA. While other institutions also are of course free to develop programs, Penn State and PSA are willing to work closely to identify topics and develop and implement seminars, workshops, or courses to meet architects' continuing education needs.

The topics for continuing education programs have been selected because of the shortcomings detected by the professional society, practitioners, and schools in a particular area. Recent topics have included site planning, application of free energy to the design of buildings, energy analysis and retrofitting, and financing of buildings.

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ATHLETIC TRAINING

There is no mandatory licensure or certification of athletic trainers in Pennsylvania. However, voluntary certified membership in the National Athletic Trainers Association (N.A.T.A.) is available to individuals seeking this recognition. The information included in this report focuses primarily on secondary school athletic trainers, but it is also relevant to athletic trainers working in higher education or professional settings.

CERTIFICATION INFORMATION

To become a certified member of N.A.T.A. an individual must:

- I. Be a member of N.A.T.A.
- II. Maintain current certification in standard First Aid and cardio-pulmonary resuscitation (CPR).
- III. Present a Competency Evaluation Checklist from a certified athletic trainer.
- IV. Meet ONE of the following options:
 - A. Complete N.A.T.A. approved undergraduate athletic training curriculum requirements, hold a baccalaureate degree from an accredited college or university, and spend at least 800 hours during a specified time period under the direct supervision of N.A.T.A. approved clinical instructors. Penn State offers such an athletic training program through undergraduate resident instruction, or
 - B. Have at least 1800 hours of on the job training during a specified time period under the supervision of a certified N.A.T.A. member, hold a baccalaureate degree from an accredited college or university, and present letters of recommendation by a certified athletic trainer and the individual's acting team physician.
- V. Pass a national examination, which takes four hours to complete and includes both written and a skills performance tests. The examination is given at various locations nationwide. There is an examination fee, and the examination may be retaken twice.

RECERTIFICATION INFORMATION

After an individual is certified through N.A.T.A., the certification is valid for three years.

Continuing education requirements: Six CEUs must be completed every three years. This requirement currently applies only to the certified members, but may be expanded to include associate members.

BACKGROUND INFORMATION

In many professions and occupations where the public health, safety, and welfare is affected, regulation exists in some form for the public's protection. However, in the area of athletic training at the high school level, individuals with varied backgrounds serve as athletic trainers without prior training or education in the field.

There is a developing environment in favor of mandatory regulation of athletic trainers in the near future. A few states have instituted credentialing programs and more states are expected to follow.

Currently, the primary voluntary certification of athletic trainers is provided through N.A.T.A., an organization of athletic trainers in high schools, preparatory schools, military schools, colleges, universities, and professional football, baseball, basketball, and ice hockey teams. State credentialing through the State Physical Therapy Board has been adopted for Pennsylvania and will be in full operation in the near future.

CLIMATE FOR CONTINUING EDUCATION

The demand for athletic trainers is greater than the supply. Several studies have shown that the general knowledge of non-certified athletic trainers is limited and a deficiency in knowledge of current developments in the field exists on a large scale. Although most athletic administrators recognize the need for the position of athletic trainer on their staffs, many of the individuals are hired to fill these job openings without concern for their qualifications or knowledge of the field.

Continuing education programs are available for certified athletic trainers both through the colleges and universities offering athletic training programs and N.A.T.A. N.A.T.A. offers continuing education for athletic trainers at workshops preceeding the national conference as well as during the conference. In addition, each district of N.A.T.A. produces an education program each year where CEU credit may be granted.

Small colleges also may benefit from staff participation in the continuing education programs, as their athletic staffs may not be as extensive as those at some of the larger schools.

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BANK MANAGEMENT

There is no mandatory certification or licensure of bank officers or managers in Pennsylvania.

BACKGROUND INFORMATION

Bank managers and officers hold a variety of management responsibilities within banks. Senior officers oversee general bank operations, and middle or lower level managers may work in such areas as loans, trust departments, and branch management. The distinction between management and non-management positions relates to whether or not supervisory responsibility exists and to the amount of independent judgment the position requires; non-management personnel hold positions in which such judgment is exercised only to a limited extent.

Desirable employment qualifications for entry level management jobs vary, depending on the size and philosophy of the employing bank. While some banks, particularly larger ones, favor persons with M.B.A.s, other employers hire individuals without graduate degrees. Generally, a college degree is a minimum requirement for administrative positions, although clerks and tellers without college educations occasionally are promoted to management. Some banks prefer that prospective employees have undergraduate backgrounds in business, but this preference is not universal and there are opportunities for persons with other college majors to obtain jobs in bank management. Previously entry level management personnel often went through a general management training program before specializing in a particular banking function, but there is a current trend among some banks to hire persons for specific areas or jobs. Movement from entry level positions into higher levels requires experience and ability; attending banking courses or workshops may accelerate promotion opportunities.

Because banking is a large, diverse field with over 14,000 banks operating in this country, there are several different professional associations. One of these organizations is the American Bankers Association (ABA), with the American Institute of Banking (AIB) serving as its educational arm. AIB is organized into local chapters, of which thirty-four are in Pennsylvania. ABA's state affiliate, Pennsylvania Bankers Association (PBA), is connected with the Pennsylvania Institute of Banking (PIB). The Independent Banking Association of Pennsylvania, associated with the Independent Bankers Association of America, represents smaller banks, and has far fewer members than PBA. The Bank Administration Institute (BAI), originally geared towards bank auditing departments, now addresses the whole range of bank functions. The Bank Marketing Association (BMA) focuses on the marketing aspect of banking, and has local and regional chapters. The Consumer Bankers Association (CBA), for commercial banks, is interested primarily in retail bank management or consumer banking. Membership in each of these associations is by institution rather than individual; a bank will generally appoint a designate to serve as the contact person for the association. One organization which is composed of individual members is the National Association of Bank Women (NABW) which is organized into about 280 local chapters throughout the country.

CLIMATE FOR CONTINUING EDUCATION

The banking industry abounds with educational opportunities, many of which are provided through national and state professional associations. AIB coursework is offered through local chapters or study groups, in both seminar and fifteen-week course formats. Correspondence courses are also available through AIB. Their educational offerings cover nearly every facet of banking and bank operations; however, most of its courses are geared to entry level bankers. The Banking Professions Group of ABA also provides conferences, workshops, and resident school sessions within different fields, such as agricultural banking or housing and real estate finance. One example is the ABA-sponsored Stonier Graduate School of Banking, an advanced bank management school directed toward leadership development for commercial banks. BAI offers a summer school for bank administration; numerous short seminars in the fields of accounting, audit, executive level interests, management development, human resources, operations, regulations, security, and trust; and conferences on topics such as technology, security, and check processing. They also are developing alternative delivery methods such as computer-based education and audio teleconferencing. CBA sponsors a Graduate School of Retail Bank Management, seminars on such current topics as truth in lending and recently enacted federal regulations, and an annual government relations forum. BMA's continuing education program includes seminars, an information center, and pre-packaged staff training programs. NABW offers several seminars emphasizing management skills. Bank managers also may participate in management seminars provided by the American Management Association.

State and local organizations provide additional programming. PBA sponsors a middle level banking school held at Bucknell University each summer, and the association recently developed human relations skills seminars for middle management. Penn State and IBAP co-sponsor a seminar for senior bank officers and one for bank boards of directors. Local chapters of national organizations often have educational components in their meetings as well.

Other continuing education opportunities are provided by institutions, commercial providers, and banks. Large banks, for instance, may develop their own in-house professional development programs; the extensiveness of their offerings depends on their size and resources. Citibank in New York recently entered the field of continuing education providers through a series of timely seminars in the areas of bank management, fee/deposit growth, operations/productivity, and funding/investment. Citibank is the first bank to offer such programming to bankers across the country.

The proliferation of continuing education programs attests to the value bank managers and officers place on staying current. In a field where bank regulations are constantly changing and competition for consumer business is keen, bankers cannot afford to ignore educational opportunities. Senior level officers generally attend any workshops or programs they feel would be valuable. Entry and middle level management personnel may be asked to participate in programs relevant to their specific function or career progression path.

Human resources management and human relations skills training are critical to first line supervisors, since they have the closest contact with

non-management level personnel. With increased competition between banks, training in useful marketing strategies is also needed. Due to the diversity of courses presently offered, it is difficult to pinpoint programming which does not duplicate current offerings. Concentration on functional areas such as management or interpersonal skills might be more beneficial than developing programs on specific topics such as automated tellers and commercial credit. It also might be feasible for universities to cooperate with AIB and offer courses that would yield credits from the university and AIB.

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CHILD DAY CARE

There is no licensure or certification of child day care personnel in the Commonwealth of Pennsylvania. However, regulations governing the minimal qualifications of child day care personnel are provided through facility licensure/registration requirements which are mandated by the State Department of Public Welfare, Office of Children, Youth and Families, Bureau of Child Development Programs.

BACKGROUND INFORMATION

Day care service for children provides out-of-home care for part of the day to children under sixteen years of age, excluding care provided by relatives. There are two types of day care facilities licensed by the State Department of Public Welfare: Group Day Care Homes and Child Day Care Centers. A third type of facility, the Family Day Care Home, must be registered with the Department and certify its compliance with State regulations. All of these facilities may provide care to children with disabilities.

The major categories of staff in child day care centers are those of administrator, director, group supervisor, assistant group supervisor, and aide.

To be an administrator, an individual must meet ONE of the following options:

- I. Complete a graduate program at an accredited college or university with a master's degree in administration, early childhood education, child development, special education, elementary education, or the human services field, including at least fifteen credit hours in administration/supervision and/or child development related courses, or
- II. Complete an undergraduate program at an accredited college or university with a baccalaureate degree in administration, early childhood education, child development, special education, elementary education, or the human services field, and have three years of work experience in the human services field, including at least two in administration/supervision.

To be a director, an individual must meet ONE of the following three options:

- I. Complete a graduate program at an accredited college or university with a master's degree in administration, early childhood education, child development, special education, elementary education, or the human services field; or
- II. Complete an undergraduate program at an accredited college or university with a baccalaureate degree in administration, early childhood education, child development, special education, elementary education, or the human services field, and have two years of work experience related to the care and development of children; or

- III. Complete an undergraduate program at an accredited college or university with an associate degree or its equivalent in administration, early childhood education, child development, special education, elementary education, or the human services field;* and have four years of work experience related to the care and development of children.

To be a group supervisor, an individual must meet ONE of the following options:

- I. Complete an undergraduate program at an accredited college or university with a baccalaureate degree in early childhood education, child development, special education, elementary education, or the human services field;* or
- II. Complete an undergraduate program at an accredited college or university with a baccalaureate degree and teaching certification in early childhood education, child development, special education, elementary education or the human services field; or
- III. Complete an undergraduate program at an accredited college or university with an associate degree or its equivalent in early childhood education, child development, special education, elementary education, or the human services;* and have two years of work experience related to the care and development of children.

To be an assistant group supervisor, an individual must meet ONE of the following options:

- I. Have a high school diploma or GED certification; fifteen credit hours in early childhood education, child development, special education, elementary or the human services field; and have one year of work experience related to the care and development of children; or
- II. Have a high school diploma or GED certification and three years of work experience related to the care and development of children.

To be an aide, an individual must meet ONE of the following options:

- I. Have a high school diploma or GED certification; or
- II. Have an eighth grade education and two years of experience related to the care and development of children.

*An individual must have fifteen credit hours related to the disabilities of the children with whom he or she will work to be employed in this position at a specialized or integrated day care center for disabled children.

A family day care home is a facility where care is provided for four, five, or six children who are not relatives of the caregiver. The primary staff person is the caregiver.

To be a caregiver in a family day care home, an individual must:

- I. Be at least eighteen years of age.
- II. Not have a criminal record of child abuse or neglect and not be receiving treatment for serious mental illness or drug or alcohol abuse.

A group day care home is a facility where at any one time care is provided for seven through eleven children who are not relatives of the caregiver. The primary staff person is the caregiver.

To be a caregiver in a group day care home, an individual must:

- I. Be at least eighteen years of age.
- II. Meet ONE of the following options:
 - A. Have a high school diploma or GED certification; fifteen credit hours in early childhood education, child development, special education, elementary education, or the human services field; one year of work experience related to the care and development of children; and at least two written references from persons other than the caregiver's family who can vouch for the caregiver's suitability to work with children; or
 - B. Have a high school diploma or GED certification; three years of work experience related to the care and development of children; and at least two written references from persons other than the caregiver's family who can vouch for the caregiver's suitability to work with children.

In applying for any position, an individual may substitute certified competency-based training for equivalent education and/or experience requirements. The Child Development Associate (CDA) credential is national certification, which is accepted as a substitute. It is given as a measure of competency when an individual does not meet the education and/or experience requirements mandated by a state Department of Public Welfare.

The current Pennsylvania regulations for licensing facilities were implemented in April, 1978. At that time, all staff members were grandfathered in under the new facility licensure regulations. Many of them did not meet the minimum requirements. Regulations for registered family day care homes were implemented in June, 1981. Because staff members did not meet requirements and because there is a diversity of staff qualifications for the varied positions, there is great disparity in the qualifications of child day care staff. All staff hired after April 2, 1978 must meet the staff qualifications as specified in the regulations.

There are approximately 1,446 licensed day care centers in Pennsylvania. There are approximately 3,200 registered family day care homes, and 183 licensed group day care homes. Homes serving fewer than four children are not required to be registered.

Of professional organizations for child day care personnel in Pennsylvania, the Pennsylvania Association of Child Care Administrators (PACCA) is the most prominent. It offers an annual conference with educational workshops for practitioners in the field. There also is an association of private day care personnel in western Pennsylvania, and local and statewide associations of family day care providers.

CLIMATE FOR CONTINUING EDUCATION

State and federal (Title XX) funds for day care are used to underwrite the direct costs of care. Day care providers may use some of these funds for in-service training. Out-service training is not available through these funds. The Bureau of Child Development Programs makes resource materials available to providers, but it does not conduct training programs.

Caregivers wishing to participate in continuing education may take advantage of programs offered by colleges and universities, and by professional associations. Participants must pay their own fees, however. Participation in degree programs may increase, as a degree is viewed as a primary means of advancement.

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CHIROPRACTIC

The State Board of Chiropractic Examiners licenses chiropractors to practice in Pennsylvania. It is unlawful for any person to practice chiropractic or assume the title of Doctor of Chiropractic unless he/she is licensed by this Board.

LICENSING INFORMATION

To obtain a license to practice chiropractic, an individual must:

- I. Be at least 21 years of age and of good moral character.
- II. Have completed a minimum of two years of college (60 credit hours) including a minimum of six credits each in biology and chemistry.
- III. Have graduated from an approved school or college of chiropractic. The program is generally four academic years in length and a Doctor of Chiropractic degree is granted at its completion.
- IV. Pass the specified examinations. If an individual takes the National Board, then only an oral interview and a practical examination must be taken at the state level. If the National Board is not taken, then a state written examination must be taken as well as the oral interview and practical examination. Examination fees are charged.

RELICENSING INFORMATION

To remain licensed, an individual must register biennially by paying a fee.

Continuing education requirements: none.

BACKGROUND INFORMATION

There are two philosophies of chiropractic. One school of thought adheres to the traditional approach to chiropractic, which deals entirely with spinal correction. Chiropractors embracing this philosophy are called straight chiropractors and tend to be affiliated with the newly formed Federation of Straight Chiropractors (FSCO) and with the International Chiropractic Association and the Chiropractic Fellowship of Pennsylvania. The second group deals with a holistic approach to chiropractic supportive appliances, the use of physical therapy, and emergency first aid. Practitioners adopting this approach are called mixers, in reference to their mixing of other methods and philosophies with traditional chiropractic. Mixers tend to join the American Chiropractic Association (ACA) and the Pennsylvania Chiropractic Society (PCS). In Pennsylvania, it appears the majority of chiropractors are mixers although more patients are probably seen by straight chiropractors.

Pennsylvania also has two peer review groups to address the two schools of thought. The Pennsylvania Chiropractor Peer Review is for mixers; the Chiropractic Peer Review of Pennsylvania is for straights.

This division within the profession has caused some problems regarding accreditation of schools of chiropractic. Currently only the Council on Chiropractic Education (CCE) is a federally approved accrediting agency, and it tends to accredit schools following the mixer philosophy. Nationally, there are fifteen accredited schools of chiropractic with various degrees of accreditation. Schools of straight chiropractic may be accredited through the Straight Chiropractic Academic Standards Association, Inc. (SCASA), an accrediting body which currently is not approved by the U.S. Department of Education.

In Pennsylvania, there is one school of chiropractic, Pennsylvania College of Straight Chiropractic (formerly called the ADIO Institute of Straight Chiropractic) in Langhorn. It is seeking accreditation through SCASA and has received Pennsylvania Department of Education approval for degree granting.

The scope of chiropractic practice in each state is determined by that state's definition of practice. Chiropractors do not prescribe drugs or perform major surgery. Chiropractors may limit their practice to specific areas, including athletic injuries, diseases and disorders of children, industrial or insurance problems, and mental and nervous disorders. There is no specialty board certification in chiropractic, although ACA offers diplomate status certification on orthopedics and roentgenology.

Pennsylvania and the majority of states include chiropractic services under all commercial health and accident policies written in those states, with the exception of Blue Shield and policies covering civil service employees. Blue Shield coverage is available in many states and is written into individual and community-rated Blue Shield contracts in Pennsylvania and is available on option with experience-rated groups. Medicare and Medicaid reimbursement is available for chiropractic services.

A certified chiropractic assistant assists the chiropractor under his/her supervision. Presently there are no licensing provisions for chiropractic assistants in Pennsylvania, and few in other states. Illinois has enacted such legislation and a few other states are considering some manner of licensure. Several chiropractic and liberal arts colleges provide educational curricula for their special training. State and national chiropractic organizations, in conjunction with the chiropractic colleges, are developing plans for legislation which would establish a nationwide accredited chiropractic assistant's program.

CLIMATE FOR CONTINUING EDUCATION

Approximately 90 percent of all states require continuing education programs for license renewal. Pennsylvania did have such a statutory requirement but dropped it recently. It was judged an ineffective means of updating for practitioners, and the annual conferences held to enable compliance with the requirement were considered inordinately expensive. Also, it was found difficult to provide a statewide program that could meet the needs of both straight and mixer chiropractors. However, the Pennsylvania Board of Chiropractic Examiners is considering a regulation to mandate continuing education.

Each accredited chiropractic college maintains an ongoing postgraduate (continuing) education division. Programs, courses, and seminars are provided for the chiropractor's continuing professional education. Continuing education programs for straight chiropractors are focused primarily on new techniques of spinal adjustment. Ongoing research in this area produces a significant amount of new information fairly regularly. The state chiropractic associations offer periodic educational programs, but there is little local programming offered in Pennsylvania. ACA councils on neurology, x-ray, chiropractic diagnosis, orthopedics, internal disorders, and sports injuries offer periodic postgraduate educational programs.

It has been suggested that the role colleges and universities can play in educating chiropractors is at the initial two-year undergraduate level rather than in continuing professional education.

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CLERGY

There are no licensing or certification requirements, or accrediting agencies, either public or private, for clergy in the United States. However, most denominations do have minimum educational requirements for ministers.

BACKGROUND INFORMATION

Clergy serve in many roles in church, government and other institutions. While most serve local congregations in a parish or synagogue, others teach, administer seminaries and other educational institutions, work in social welfare agencies, or serve as campus ministers or chaplains in hospitals, correctional facilities, industry, or the Armed Forces. Still others are engaged in preaching, evangelization, or missionary work.

Educational requirements for clergy vary greatly from denomination to denomination. While some require very little formal education, most require a baccalaureate degree or its equivalent plus study in an accredited or church-recognized seminary. Seminary training is usually broad in scope, but often focuses on theology, philosophy, scripture study, and doctrinal investigation specific to the denomination. Seminary students also study church history, psychology, public speaking, and other disciplines relevant to the responsibilities of the clergy. In addition to seminary training, many clergymen and women pursue additional education to equip them for specific positions after ordination.

Many Protestant denominations require candidates to complete three or more years of postgraduate seminary study before ordination. This study may consist of experiential training as well as formal education. The course of study often leads to the Master of Divinity or the Bachelor of Divinity degree. The Master of Theology degree requires at least one additional year of study after the Master of Divinity or the Bachelor of Divinity degree. A Doctor of Ministry degree is often earned after one has served as a pastor and returns to seminary on a part-time basis.

Candidates for the Catholic priesthood must study at least eight years after high school before they may be ordained. Although some priests may study longer, most spend two years in a minor seminary followed by six years in a major seminary. The course of study usually leads to the Master of Theology degree. This degree, or its equivalent, is ordinarily required before ordination.

Rabbinical students must study from seven to ten years beyond high school. Requirements vary depending upon the branch of Judaism with which the seminary is connected. Conservative and Reform seminaries require five to six years of training beyond the baccalaureate degree, while Orthodox seminaries require training in a prerabbinical program plus at least three years in an ordination program beyond the baccalaureate degree.

CLIMATE FOR CONTINUING EDUCATION

There is a strong interest among clergy for continuing education. Interests include programs in administration, pastoral counseling, sociology, the psychology of religion, human development, and religious studies. There is a need for Penn State to develop and offer programs in these areas for clergy.

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Washington, D. C. 20036

National Center for Church
Vocations
1307 South Wabash Avenue
Chicago, Illinois 60605

National Council of the Churches of
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COLLEGE STUDENT PERSONNEL SERVICES

There is no mandatory certification or licensure of college student personnel workers in Pennsylvania.

BACKGROUND INFORMATION

The field of college student personnel services is very broad and encompasses many out-of-class functions within the college or university setting, including academic advising, admissions, career development and placement, counseling, financial aid, international student services, student activities, new student programs, minority student programs, handicapped programs, records, veterans programs, religious affairs, and residence life. Although the positions are diverse, most share the same basic skill areas of management and counseling and report to the same administrative officer, usually the dean of students or student affairs, or a vice president for student affairs. College student personnel generalists may have responsibility for administering entire program areas, while specialists concentrate their efforts in a more narrowly defined service. Those practitioners who specialize in counseling are described elsewhere in this publication.

Entry level positions in college student personnel services generally require a master's degree in counselor education, college student personnel services, or a related area. One to two years of related experience, such as a residence hall assistantship or practicum, are preferred. A doctorate in higher education, college student personnel services, or counselor education or considerable experience is generally required for middle to upper management positions. Over 125 colleges and universities nationwide offer college student personnel programs. Penn State offers both the master's and doctorate in counselor education/college student personnel services. Similar graduate programs in Pennsylvania are offered at Indiana University, Shippensburg University, the University of Pennsylvania, Temple University, the University of Pittsburgh, and Duquesne University.

There are an estimated 2,000 to 3,000 college student personnel workers in Pennsylvania's colleges and universities. Numerous national and state professional associations represent their interests. Major associations include the American College Personnel Association (ACPA) which is a division of the American Association for Counseling and Development (AACD), the National Association of Student Personnel Administrators (NASPA), the National Association for Women Deans, Administrators and Counselors (NAWDAC), the Association of College Unions-International (ACU-I), and the National Association of Foreign Student Affairs (NAFSA). Pennsylvania affiliates are the Pennsylvania College Personnel Association (PCPA), the Pennsylvania Association of Student Personnel Administrators (PASPA), the Pennsylvania Association for Women Deans, Administrators and Counselors (PAWDAC), and the Pennsylvania Counseling Association (PCA).

Some of the associations have set professional practice and preparation standards for their members. For those practitioners who specialize in counseling, the National Board of Certified Counselors (NBCC) to date has certified 10,000 counselors and has imposed continuing education requirements

for recertification after five years. Other associations are being encouraged to create certification standards by the newly formed Council for the Advancement of Standards, which consists of representatives from the major national college student personnel associations. They are attempting to incorporate group standards into a set of standards that represents the field as a whole. These standards can then be used by any accrediting body that evaluates graduate programs in counselor education/college student personnel services. It is possible that accreditation of academic programs will eventually lead to certification of individual practitioners.

CLIMATE FOR CONTINUING EDUCATION

Continuing education for college student personnel workers is provided mainly by professional associations and their member institutions. Many associations hold annual conferences which include educational components. Workshops and seminars are advertised nationally, but time and cost considerations often limit the participation of entry level practitioners in national programs.

During the past three years, PCPA has sponsored semi-annual one-day workshops, in the eastern and western parts of the Commonwealth. Its first annual professional development conference was conducted in 1982. PCA holds an annual educational conference in the fall and additional workshops during the year. Topics may include leadership development, the non-traditional student, or building community, for example. Continuing education units for workshop attendance are not generally available at this time. However, it is felt that most practitioners are motivated by interest rather than credentialing incentives. Most other state organizations in Pennsylvania have annual programs that resemble the PCPA approach or regional programs which are held in combination with other states.

Although there are a number of continuing education opportunities for college student personnel workers in Pennsylvania, they are geographically scattered and there is no overall coordinated continuing education effort. It is difficult for practitioners to get a comprehensive picture of what is being offered where. This is partly due to the number and diversity of institutions engaged in training their own staffs and the staffs of neighboring colleges.

Two levels of continuing education needs can be identified: broad-based management development in areas like budgeting, organizational behavior, time management, productivity, or management by objectives; and education in topical areas such as media technology, government legislation, or leadership development.

The professional practice and preparation standards being developed by the national college student personnel associations emphasize requirements for entry into the field. It is unlikely that the subject of mandatory continuing education will surface for those not in the counseling specialty in the foreseeable future.

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COMMUNICATION DISORDERS

There is no mandatory licensure of communication disorders specialists in Pennsylvania. The Pennsylvania Department of Education (PDE) issues certificates for specialists employed in public school settings. Voluntary certification is provided by the American Speech-Language-Hearing Association (ASHA) and the Council on Education of the Deaf (CED).

CERTIFICATION INFORMATION

In order to be employed as a speech correctionist or teacher of the hearing impaired in a public school, an individual must first earn an Instructional I (provisional) certificate, issued by PDE. To obtain an Instructional I certificate, an individual must:

- I. Earn a baccalaureate degree.
- II. Complete a PDE-approved program in speech correction or teaching the hearing impaired.
- III. Receive the recommendation of the appropriate administrator of a PDE-approved program.

The Instructional I certificate is valid for three years. To receive an Instructional II (permanent) certificate an individual must:

- I. Meet ONE of the following requirements:
 - A. Hold a valid Instructional I certificate and have earned at least twenty-four post-baccalaureate collegiate or PDE-approved in-service credits, or
 - B. Hold a master's degree or the equivalent.
- II. Have three years of satisfactory work experience.

An individual with a master's degree but no experience may receive an Instructional I certificate, but must complete the work experience requirement before receiving an Instructional II certificate.

ASHA offers the Certificate of Clinical Competence (CCC) in speech-language pathology and in audiology. In order to obtain the CCC an individual must:

- I. Hold a graduate degree or the equivalent in speech and language pathology, audiology, or speech, language and hearing science, or hold a graduate degree in a related discipline. Educational requirements specify that the candidate should have a general background education as well as a specified distribution of courses in speech, language, and/or hearing.
- II. Complete 300 hours of supervised clinical experience within the training institution or through one of its cooperating programs.

- III. Obtain the equivalent of nine months of full-time professional experience (the Clinical Fellowship Year) doing clinical work in the major professional area in which the certificate is sought. Work must be done under the supervision of a CCC holder.
- IV. Successfully complete a national certification examination in speech and language pathology or in audiology.
- V. Pay a certification fee.

The Council on Education of the Deaf (CED) offers provisional and professional certificates for teachers of the hearing impaired. To earn a provisional certificate, an individual must:

- I. Hold a baccalaureate degree.
- II. Complete the course and practicum work of the core curriculum for professional preparation as defined by CED.

The provisional certificate is valid for five years and may be renewed for an additional five years. In order to renew the certificate, an individual must:

- I. Complete six semester hours applicable toward professional certification.
- II. Complete at least one year's teaching experience with hearing impaired children.

In order to obtain a professional certificate, an individual must:

- I. Complete the core curriculum for provisional certification.
- II. Complete an additional program of advanced study of twenty additional semester hours as specified by CED.
- III. Complete three years of teaching experience under the supervision of a qualified professionally certified educator of hearing impaired children.

RECERTIFICATION INFORMATION

There is no recertification of speech correctionists or teachers of the hearing impaired through PPT.

ASHA offers no recertification provisions. However, it has recently implemented an Award for Continuing Education (ACE), thus recognizing individuals who participate in professional development activities on an ongoing basis.

CED's professional certificate is valid for five years. In order to renew the certificate, an individual must meet ONE of the following requirements:

- I. Complete a minimum of three semester hours of coursework in areas related to the candidate's field of specialization, OR
- II. Teach the equivalent of a semester course in an area of special education in a college or university, OR
- III. Have an article published in a professional journal.

BACKGROUND INFORMATION

Communication disorders encompass the specialties of speech and language pathology, teaching the hearing impaired, and audiology. The field has been evolving towards greater integration of all its component specialties. An indication of this evolution can be found in ASHA's name change. Previously named the American Speech and Hearing Association, the organization recently changed its name to the American Speech-Language-Hearing Association. Another example is Penn State's Communication Disorders program, which was formerly called the Speech Pathology and Audiology program. Thus, although practitioners are trained as specialists, there is increasing emphasis on the interrelationship between speech, language, and hearing.

Speech and language pathologists work with children and adults who have speech, language, and voice disorders caused by brain injury, cleft palate, mental retardation, or emotional problems. Audiologists primarily assess and treat hearing problems. Teachers of the hearing impaired work with persons having severe loss of hearing. While many practitioners diagnose and/or treat clients, the primary responsibility of others may be research, supervision, or teaching.

Public schools employ approximately one half of all communication disorders specialists. In Pennsylvania, speech correctionists and teachers of the hearing impaired must meet the requirements detailed previously. There is no state certificate for audiologists. However, in order for school districts to receive reimbursement, they must hire audiologists by "permit". PDE issues permits to individuals with master's degrees in audiology.

Other specialists are employed in colleges and universities, hospitals, speech and hearing centers, government agencies, and industries, or are engaged in private practice. Since Pennsylvania has no general licensure law, other organizations or governmental agencies set their own employment requirements. The CCC is viewed as a very desirable credential and may be required to obtain or advance in particular positions. For teachers of the hearing impaired, CED certification is desirable. Practitioners assuming supervisory responsibilities in speech corrections or audiology in public schools must obtain a supervisory certification issued by PDE.

Penn State offers baccalaureate, master's, and doctoral degrees in communication disorders. The program is approved by ASHA, CED, and PDE. Other schools in Pennsylvania offering approved communication disorders programs include the University of Pittsburgh, Temple University, and some of the state colleges.

The major professional association serving the field is ASHA, with approximately 41,000 members. Its state affiliate is the Pennsylvania Speech

and Hearing Association (PSHA). PSHA has a membership of about 1,200, including approximately 150 audiologists, 300 teachers of the hearing impaired, and 750 speech correctionists. CED is a smaller national organization, focusing on professional standards for teachers of the hearing impaired. There are also academies for specific interest areas, such as rehabilitative audiology, supervision, and aphasia. These academies usually meet in conjunction with the ASHA national meeting or hold separate mid-year meetings.

CONTINUING EDUCATION

ASHA's recent introduction of a voluntary Award for Continuing Education (ACE) has helped to motivate individuals who already possess the CCC to participate in continuing education activities. There are four ways to earn the ACE: earning seven CEUs, obtaining six academic credits, earning a combination of CEUs and credits, or retaking the national examination. Activities must be accomplished during a three-year period. All but six of the CEUs must be obtained through ASHA-approved sponsors. Credentialed practitioners have expressed a strong interest in remaining up-to-date through achievement of the ACE.

ASHA's award is just one part of their continuing education program. The Association's Continuing Education Board approves sponsors and publicizes and monitors activities. The Association also conducts workshops and conferences, and has plans to initiate correspondence courses, programmed learning, learning contracts, and self-assessment procedures in the future. Computerized record keeping of participants and sponsors is another function of ASHA.

Continuing education providers include ASHA and PSHA, colleges and universities, intermediate units, other private organizations, and commercial equipment vendors. Temple University, the University of Pittsburgh, and several hospitals (e.g., Children's Hospital of Philadelphia and Williamsport Hospital) are among the ASHA-approved sponsors in Pennsylvania. Current continuing education activities in the State include a Three Rivers Conference sponsored annually by the University of Pittsburgh and the annual PSHA meeting. The Technical Assistance to Sensory Impaired Program, which previously provided extensive programs to speech-language pathologists, will no longer offer a summer education program which addresses pathologists' in-service needs.

Penn State has offered limited continuing education programming in the past. A summer master's degree program was offered for nontraditional students. Summer workshops for minority students also were held; however, funding no longer exists for this program. Penn State sometimes contracts with state agencies, such as the Office of Vocational Rehabilitation, to conduct workshops.

Practitioners have indicated an interest in participating in professional development activities, particularly credit courses or workshops offered by an approved sponsor. Because most ASHA or PSHA conference sessions are short, practitioners cannot accumulate sufficient CEUs for the ACE simply through annual conference attendance. Thus, they express an eagerness to participate in additional activities.

Topics suggested by faculty members and practitioners include language and learning disabilities, sign language, cued speech, use of non-verbal communication devices, pragmatics, computer applications, and office management. (Pragmatics refers to an integrated approach to communication in which therapists view speech or language problems in the context of the client's functional interaction and expression.) Computer usage might take several forms. For instance, software has been developed at Penn State to allow handicapped individuals access to computer software. Computers might also be used for accounting and record keeping for practitioners in office settings as well as for writing Individual Educational Programs. Computer-assisted instruction might be used to teach sign language or to teach reading to hearing impaired children.

If budgets cuts have an impact on job availability for communication disorders specialists, practitioners might be interested in courses or workshops which would focus on developing private practices. Knowledge of office management techniques would be essential.

In general, the opportunity to learn and practice a new skill or to watch a particular technique demonstrated has been recommended by practitioners as being very useful. They suggest that a hands-on approach in a clinical setting could provide an opportunity for practitioners to remain current as new diagnostic and treatment methods are developed.

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CRIMINAL JUSTICE CORRECTIONS

There is no mandatory certification or licensure of Corrections Officers or Corrections Counselors in Pennsylvania, but there are eligibility standards for specific positions as discussed below.

BACKGROUND INFORMATION

There are many support personnel in correctional institutions but the two primary positions are those of Corrections Officer and Corrections Counselor.

There are several levels of the Corrections Officer position ranging from trainee to supervisor. The Corrections Counselor works in the treatment division of the institution and provides direct counseling to the inmates. Corrections Officers and Counselors are employed primarily in the nine state correctional institutions (SCIs) in Pennsylvania. The federal penitentiary in Lewisburg, a federal prison camp in Allenwood, and county prisons also employ Corrections Officers and Counselors.

An individual wishing to qualify as an entry level Corrections Officer trainee in an SCI must:

- I. Be at least twenty-one years of age.
- II. Have a high school degree or its equivalent.
- III. Pass a state civil service examination.
- IV. Pass a physical examination, physical fitness, and psychological tests.
- V. Go through two background checks, one carried out by the employing institution and the other by the State Police.

An individual selected for employment must complete a four-week intensive training program at the State Bureau of Correction Academy at Camp Hill. The employing institution then provides additional training and orientation to the position. After one year of employment, an employee is promoted to the position of Corrections Officer 1, and may advance up to supervisory levels by successfully passing state civil service examinations and receiving satisfactory performance evaluations.

An individual wishing to qualify as a Corrections Counselor in an SCI must:

- I. Meet ONE of the following options
 - A. Have five years of progressively responsible human services experience including one year in a professional capacity involving casework or counseling services provided in a social service setting; or

- B. Have one year of experience in casework or counseling services provided in a social service setting AND a baccalaureate degree; or
- C. Have a master's degree in sociology, psychology, counseling, social work, or a related field; or
- D. Have one year of experience as a Corrections Officer in an SCI, AND a baccalaureate degree in sociology, psychology, social work, counseling, or a related field; or
- E. Have a baccalaureate degree in sociology, psychology, social work, counseling, or a related field, including a practicum in a correctional setting (institution or probation or parole office); or
- F. Have a combination of education and experience which can be substituted at the discretion of the State Civil Service Commission.

II. Pass a civil service examination.

An individual selected for employment must complete a four-week intensive training program at the Academy at Camp Hill.

In the State system, there are approximately 1,590 Corrections Officers and 100 Corrections Counselors.

The requirements for personnel working in the county prisons are set by each county. However, many Corrections Officers employed by these prisons are encouraged to participate in the four-week training program at the State Bureau of Correction Academy in Camp Hill.

Corrections Officers and Counselors in federal correctional institutions must meet the same general Corrections Officer qualification standards. There are several grades (GS 6 to 13) of this position. Promotion to a higher grade is contingent upon meeting general and specific experience requirements, being rated on the basis of an evaluation, and maintaining good physical condition and health.

The general experience requirement can be met in many ways and can include social case work in a welfare agency, active participation in community action programs, or personnel management experience. The specific experience requirement refers to experience in the correctional custody and supervision of inmates in a correctional institution or community based treatment facility. College education can be substituted for training and experience requirements.

All grades require three and one-half years general experience. The length of required specialized experience increases with promotion to higher grades. The specialized experience requirements include satisfactory completion of various federally operated inservice training courses.

At the Lewisburg Federal Penitentiary, there are approximately 175 Corrections Officers and twenty Corrections Counselors.

The pay for Corrections Officers is considered to be good and is viewed by many as an entry level position for college graduates. These people tend to go on to counselor or administrative positions within the system.

CLIMATE FOR CONTINUING EDUCATION

A large amount of inservice training is offered at both the state and federal correctional institutions. The inservice programs provided at the federal institutions are mandated by civil service requirements. This training is offered for newly promoted individuals and for updating purposes. The vast majority of the inservice training is developed and implemented within the system; there is little or no contracting of training services from other agencies or education institutions. However, employees are encouraged to participate in additional continuing education on their own time. Many of them participate in degree programs in criminal justice and take seminars or courses in management and related areas.

General training seminars are offered at each state institution. These sessions address such issues as drugs, weapons familiarization, and self defense, and are offered approximately every three months. Special programs and seminars are held to deal with topics such as stress and labor relations, and management programs are also provided. The Bureau will contract with educational institutions and other agencies (the Federal Civil Service Commission, for example) to provide some of this training.

Employees of the SCIs are also encouraged to participate in continuing education programs offered by various professional associations, such as the American Corrections Association and the Pennsylvania Prison Warden Association, and educational institutions.

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CRIMINAL JUSTICE
LAW ENFORCEMENT

In Pennsylvania an individual wishing to enter the law enforcement field must satisfactorily complete a mandated training program. There is no licensing or certification, however.

MANDATORY TRAINING INFORMATION

The Municipal Police Training Act of 1974 states that an individual wishing to be employed as a law enforcement officer must:

- I. Be twenty-one years of age or older.
- II. Pass an entrance examination conducted by the police agency.
- III. Be the subject of a background check that reveals nothing of a questionable nature.
- IV. Meet standards regarding height and weight, and pass a physical examination, including vision tests.
- V. Undergo a psychological examination.
- VI. Participate in and pass the appropriate training program.
 - A. For municipal police officers this consists of 480-hour course of study. It is offered by the Pennsylvania State Police at the Police Academy at Hershey and the sub-academy at Greensburg, several institutions of higher education in the state, and several police agency academies (i.e., Allentown, Bethlehem, Pittsburgh, and Philadelphia).
 - B. For state police officers, a six-month training program is conducted at the Police Academy at Hershey.

BACKGROUND INFORMATION

Broad areas to be included in the training program for municipal law enforcement officials are prescribed by the Municipal Police Training Act of 1974. The training program is generally given as a twelve-week course, but is sometimes offered by colleges and universities on an extended basis. In this manner the course is stretched out over a longer period of time, with classes held evenings and/or weekends, so that an individual may pursue this training while working at another job. The training program includes interim and final examinations.

The six-month mandated training program for state police officers is offered only at the Police Academy at Hershey. The program is designed by the training division there, with approval from the State Commissioner of Police. Through an arrangement with the Capitol Campus of Penn State, individuals enrolled in this training program are able to take a limited number of credit

courses while at the Academy. They may also obtain credit by examination for certain courses at this time. All of these credits would be applicable should the individual pursue a baccalaureate degree.

While Pennsylvania offers a training workshop to qualify individuals for a license to carry a weapon, law enforcement officials are not required to obtain a license through this procedure. Their regular programs include the necessary training, and when sworn in as law enforcement officials they are eligible to carry weapons.

CLIMATE FOR CONTINUING EDUCATION

There are no mandatory continuing education requirements for law enforcement officials. However, they describe themselves as being "in continuous training" on a voluntary basis. Continuing education is provided by in-service programs and by institutions of higher learning both within and outside of Pennsylvania. State and municipal officials may, and often do, participate in the same continuing education programs. Penn State has been active in offering programs for practitioners in the criminal justice field. Training is conducted for police executives, supervisors, and investigators.

Law enforcement officials express an interest in both credit and non-credit continuing education. Those pursuing a baccalaureate degree do so to increase their opportunities for promotion and to provide themselves with mobility into other, related job areas after retirement. There has been some evidence to indicate that police officers with college degrees are better able to handle the non-law enforcement situations they encounter, such as conflict resolution.

Suggested topic areas for continuing education, in addition to those already available, include crisis intervention, practice-oriented psychology, liability issues, hiring practices, and training trainers.

Private security is an emerging area of new interest that is related to law enforcement. Individuals with backgrounds in law enforcement who are moving into private security could benefit from continuing education for retraining. Penn State has offered workshops in the private security field in the past.

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CRIMINAL JUSTICE
PROBATION AND PAROLE

There is no mandatory licensure or certification of probation and parole officers in the Commonwealth of Pennsylvania.

BACKGROUND INFORMATION

A probation officer is charged with the responsibility of conducting investigations for the court and overseeing a juvenile or adult offender when he/she is adjudicated delinquent or convicted of a crime but is released to probation supervision in the community rather than sentenced to an institution. A parole officer is primarily charged with the responsibility of supervising an offender when he/she is released from prison prior to completing the full term of sentence.

Parole and probation officers may be employed at the county level as employees of the county courts or at the state level as employees of the State Board of Probation and Parole.

Probation and parole also exist at the federal level. This group of officers is very small and tends to be composed of "the cream of the crop" of probation and parole officers. Federal probation and parole officers are usually paid higher salaries than state and local officers. The experiential practice requirements for federal officers tend to be more stringent and a master's degree in criminal justice or a related field may be required.

Practice requirements for probation and parole officers may vary slightly from county to county. The general requirements, however, for probation and parole officers at the county or state level are:

- I. To have a baccalaureate degree with an emphasis in administration of justice or the social behavioral sciences.
- II. To have experience in criminal justice or a related area. This requirement often can be met by a practicum in a degree program or by being employed in a human services agency.
- III. To take a county or state developed civil service examination (not required in all cases).

Bills have been introduced which would require annual continuing professional education for state and county probation and parole officers in Pennsylvania. In general, the field is moving toward some minimum requirement for continuing professional development. Eventually, when a bill requiring continuing education is passed, the profession is expected to move towards licensure. Licensure would be an aid to enforcing the continuing education requirement.

CLIMATE FOR CONTINUING EDUCATION

Approximately eighteen schools in Pennsylvania have either a program or some course work in criminal justice. Penn State offers a baccalaureate

degree in criminal justice and master's and doctoral degrees in Community Systems Planning and Development with an emphasis in administration of justice.

Penn State is also very active in offering in-service training for probation and parole officers as well as for those working in other justice system components. Penn State continuing education programs in related areas include training for juvenile court judges, police executives and supervisors, correctional managers, private security personnel, and others.

The majority of continuing education or in-service training for probation and parole officers is offered in cooperation with various agencies, including the State Board of Probation and Parole and the Juvenile Court Judges Commission.

An annual training conference is provided each year by the Pennsylvania Association on Probation, Parole and Correction.

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DENTAL HYGIENE

The State Dental Council and Examining Board licenses dental hygienists in Pennsylvania. It is unlawful for any individual to practice dental hygiene unless he/she is licensed by this Board.

LICENSING INFORMATION

To practice as a dental hygienist, an individual must:

- I. Be at least nineteen years of age.
- II. Have completed an approved certificate or degree program in dental hygiene.
- III. Pay an application fee.
- IV. Successfully complete two examinations:
 - A. The National Board, a written examination for which there is a specified fee charged.
 - B. The North East Regional Board, a primarily practical examination for which a fee is also charged. The North East Regional Board was developed to help establish reciprocity with fifteen states.

RELICENSING INFORMATION

To be relicensed an individual must pay a biennial registration fee.

The licensing board requires each licensee to list the continuing education courses taken during each biennial registration period.

Continuing education requirements: none.

A dental hygienist who has not practiced for a period of several years (usually five or more) will be required to take a refresher course recognized by the Board to activate his/her license.

BACKGROUND INFORMATION

The majority of dental hygienists are trained in a two-year program although there is a trend toward obtaining a baccalaureate degree in dental hygiene. Currently dental hygienists with a baccalaureate degree in education may work in public school programs. Those who obtain a master's degree in dental hygiene frequently use it as preparation for teaching in dental hygiene programs and alternate practice settings. The schools in Pennsylvania offering dental hygiene programs are Temple University, The University of Pittsburgh, Montgomery County Community College, Northampton County Community College, Thomas Jefferson University, Williamsport Area Community College, Luzerne County Community College, and Community College of Philadelphia.

There is a general shortage of dental hygienists in rural areas, but the converse is true in most urban areas. A large number of dental hygienists work only part time and are paid on a daily basis with few if any fringe benefits. Full-time hygienists also generally have few fringe benefits. This situation makes it difficult for hygienists to obtain funding or time off to attend continuing education programs.

The job requirements of a dental hygienist have changed little over the past thirty years. Hygienists have been licensed since their occupation emerged and the job responsibilities have been fairly well defined in licensing regulations. About ten years ago, however, a movement began to expand the responsibilities of dental hygienists. Training programs often include advanced training which enables hygienists to assume expanded duties. Many expanded responsibilities can be filled by a dental assistant, however, and dentists may prefer to use an assistant because the salary for that individual would be less than that for the hygienist. These duties vary by state according to the restrictions of practice cited in each state's dental practice act.

An individual who joins the professional association for hygienists must join the local, state, and national levels of The American Dental Hygienist Association (ADHA). The state professional association is the Pennsylvania Dental Hygienists' Association (PDHA). There are no continuing education requirements for membership in ADHA or PDHA.

The Academy of Dental Hygiene Studies was established by PDHA to recognize continuing education participation. To join the Academy, an individual must have had 3.0 CEUs within the past five years (as approved by PDHA) and to maintain membership, he/she must complete .07 CEUs a year. All of the educational programs offered by the local, state, or national dental hygienists associations may be taken for CEU credit. Credit for other courses may be approved after submission of the necessary requirements for course approval.

CLIMATE FOR CONTINUING EDUCATION

Many continuing education programs are offered for dental hygienists. However, it is often difficult for a hygienist to get time off to attend a conference or seminar, and if time is taken off, it is most often without pay. Also, hygienists are frustrated by attending educational programs and learning new techniques or methods that they cannot apply in their offices.

There is some feeling among hygienists that the programs offered do not reflect the needs or interests of these practitioners. Some indicate a need for refresher courses in basic subjects, such as nutrition and anatomy, which they had earlier. Others feel the need for more home study courses since it is so difficult to attend seminars and workshops. The northeastern and northwestern sections of Pennsylvania may be particularly suitable to correspondence study as dental hygienists in those areas are fairly isolated from continuing education programs.

Continuing education is offered through the local, state, and national dental hygienists associations as well as through the schools with dental hygiene programs. In Pennsylvania, the local chapters of PDHA are quite

active, providing educational programs that generally draw from local resource people such as nutritionists, psychologists, dentists, and other health related professionals. ADHA offers continuing education correspondence courses.

There is no action being taken by either the state licensing board or national or state dental hygienists associations to implement mandatory continuing education requirements at this time. This may be due more to the reasons discussed, such as cost, difficulty of getting time off from work, and lack of support from the supervising dentist to implement new procedures or techniques in the office, than to hygienists' desire to remain updated.

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DENTISTRY

The State Dental Council and Examining Board licenses dentists to practice dentistry in Pennsylvania. It is unlawful for any individual to practice dentistry unless he is duly licensed by this board.

LICENSING INFORMATION

To obtain a license an individual must:

- I. Be a graduate of an approved program of dentistry and obtain a D.D.S. or D.M.D. degree.
- II. Pay an application fee.
- III. Pass two examinations:
 - A. The National Board given by the Joint Commission on National Dental Examinations, three times a year at the three dental school in Pennsylvania: Temple University, The University of Pennsylvania, and The University of Pittsburgh. It is a three day written test and is given in two parts; part one is administered at the conclusion of the sophomore year and part two is administered at the conclusion of the student's senior year. There is a fee charged to sit for the examination.
 - B. The North East Regional Board, both written and clinical, which serves as a qualifying procedure for licensure. The examination is a five-part test in clinical dentistry. Remedial courses required for candidates who sustain two successive failures must be completed in an accredited school of dentistry. There is a fee charged to sit for the examination.
- IV. Pay a registration fee.

RELICENSING INFORMATION

Relicensure is obtained by payment of a biennial fee.

Continuing education requirements: none.

BACKGROUND INFORMATION

The American Dental Association (ADA) is the national professional association of dentists. State chapters of ADA are responsible for setting their own policy and standards as they relate to the practice of dentistry in the respective state.

The Pennsylvania Dental Association (PDA) has approximately 6,500 members. The state is divided into ten districts and then subdivided into sixty-five local chapters. There is a high level of participation and interest in the local chapters. PDA coordinates a variety of activities,

including an access to care program for the elderly, a denture identification system for nursing homes, and Children's Dental Health Month.

There are nine specialty areas within dentistry: oral pathology, maxillo-facial surgery, public health, prosthodontics, periodontics, pedodontics, endodontics, orthodontics, and oral surgery. Each of these areas has its own certification board and professional association. Recently some combination specialties, such as orthodontics/pedodontics and orthodontics/periodontics, have developed.

Specialty certification involves additional training beyond dental training ranging from eighteen months to three years. A dentist can become a specialist through either a certification program or a master's program. Specialty certification comes automatically with either the certification or master's program and is valid for life; no recertification or continuing education is required to maintain the specialty designation.

CLIMATE FOR CONTINUING EDUCATION

The attitude of PDA towards mandatory continuing education as either a relicensure or membership requirement is negative. The Association feels strongly about providing continuing education for its members and favors having members participate on a voluntary basis. It is the general consensus of the Association and Pennsylvania dentists that most practitioners take the initiative to participate voluntarily in some form of continuing education.

Some dentists are members of the Academy of General Dentistry. This association is open to all specialty groups but is primarily geared towards the general practitioner. The Academy has mandatory membership requirements including the completion of 75 clock hours of continuing education every three years. The continuing education programs must be approved by the Academy or the state associations of the Academy. In Pennsylvania, 1,240 dentists are members of the Academy.

ADA provides some continuing education programs or courses, primarily through its annual conference. The Association also has an approval procedure for programs offered by schools of dentistry or dental societies, or for any program which attracts participants from more than four states. ADA encourages state societies to develop their own approval procedures so that they can approve programs which are not eligible for ADA approval. However, in Pennsylvania the state society has not instituted an approval mechanism.

The local chapters provide voluntary programs for dentists to study a variety of topics. There is great interest in these programs. PDA offers programs in five areas of the state where practitioners do not have easy access to a dental school. Credit may be given for attendance at local, district and state programs and workshops, if they have been accredited by the Academy of General Dentistry.

Some of the areas of programming include X-ray, full mouth reconstruction, updating in specialty areas, communication skills, dental office emergencies, malpractice issues, and practice management, particularly as it relates to dental insurance.

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DIETETICS

While there is no legal licensure or certification of dietitians in Pennsylvania at this time, resource persons suggest that it is likely there will be in the future. The American Dietetic Association (ADA) registers dietitians "to protect the health, safety, and welfare of the public by encouraging high standards of performance of persons practicing in the profession of dietetics." Individuals registered by ADA may use the trademarked designation "Registered Dietitian," or "R.D."

REGISTRATION INFORMATION

To become a Registered Dietitian, an individual must:

I. Meet eligibility requirements as follows:

A. Education

1. A baccalaureate, master's, or doctoral degree from an accredited college or university is required.
2. The degree program must be approved by ADA and must meet their academic requirements, which currently are labeled Plan IV. Additional course work is required to "update" work completed five or more years prior to application.

B. Experience

1. With a baccalaureate degree, completion of an approved dietetic internship or a three-year preplanned work experience program is required. Experience is incorporated in coordinated undergraduate programs leading to a baccalaureate degree.
2. With a master's degree, completion of a preapproved graduate assistantship or preapproved qualifying work experience is required.
3. With a doctoral degree, six months of preapproved qualifying work experience is required, and is reviewed individually.

C. Personal endorsements are to be furnished at the time of application.

II. Pass the registration examination, which is given twice yearly by an independent professional testing organization.

III. Pay the required examination and registration fees.

REREGISTRATION INFORMATION

To remain registered, an individual must:

- I. Pay an annual fee.
- II. Complete seventy-five clock hours of approved continuing education over each five-year period.

BACKGROUND INFORMATION

Dietitians work in a great variety of positions involved with both health maintenance and restoration. Many are employed in hospitals, but a growing number are engaged elsewhere in such areas as consultation, business and industry, education, community health centers, health and fitness centers, medical centers and a variety of feeding programs. Dietitians are registered as generalists; while specialized registration does not exist at this time, many dietitians do specialize in a particular area. Dietitians may specialize in three areas--food systems management, clinical dietetics, community--or work in general dietetics. An increasing number do private practice consultation.

When registration was adopted in 1969, all dietitians who were ADA members were automatically registered upon payment of the registration fee. In order to maintain that registration, however, these individuals have had to meet the continuing education requirements in the same manner as those dietitians who have been registered by examination.

There are six categories of ADA membership: Active, Affiliate, Retired, Associate, Technician, and Honorary. However, most members are R.D.s. ADA has over 51,000 members, while the Pennsylvania chapter, the Pennsylvania Dietetic Association (PDA), has approximately 2,000 members. PDA has seven district associations: Philadelphia, Pittsburgh, Northeast, Southern Allegheny, Northwest, Central, and Lehigh Valley. ADA members automatically become members of the state dietetic association in the state in which they reside, its district associations, and any of the many approved dietetic practice groups.

ADA accredits internships and coordinated undergraduate programs. ADA also approves the two-year programs for dietetic technicians. Dietetic technicians are not registered. They serve as members of the dietetic team performing implementation and evaluation, food systems management, and nutrition care tasks. Technicians are directly responsible to the R.D. Dietary managers, formerly dietetic assistants, are now eligible for membership in the Hospital Institutional Educational Food Services Society (HIEFSS).

CLIMATE FOR CONTINUING EDUCATION

Continuing education programs must be approved in order for an individual to receive credit for participation. Prior approval for national programs is granted by state associations. Each state association, including PDA, has a

committee to grant approval for programs offered in the state. The state association must be at least co-sponsor of any program it approves. Subsequent approval of a program may be applied for in cases where a program was not offered primarily for dietitians, or was attended by very few dietitians, and hence did not request prior approval.

Dietitians who are located in metropolitan areas or are able to travel to programs offered by state and national associations or private companies have no difficulty in finding enough continuing education programs to meet their needs. Individuals in rural areas and the 200 to 300 R.D.s residing outside of the country may not have an adequate supply of continuing education programs directly related to dietetics available to them. ADA has cassette tapes for continuing education, and there are a number of correspondence courses offered. However, a wide spectrum of upper-level correspondence courses less directly related to dietetics, such as business law, computer science, or speech communications, may be used to accrue continuing education credit, subject to ADA approval. In addition, ADA offers continuing education programs via satellite broadcast which are shown at various sites across the nation. Also, there is an opportunity to obtain continuing education credits by completing questionnaires that follow continuing education articles which appear in the Journal of the American Dietetic Association.

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EDUCATION
ELEMENTARY AND SECONDARY SCHOOL COUNSELING

The Pennsylvania Department of Education (PDE) requires that public school counselors hold a valid professional certificate, issued by PDE, upon recommendation from an institution with a PDE approved program for the preparation of school counselors.

CERTIFICATION INFORMATION

School guidance counselors must hold an Educational Specialist I or II certificate. To obtain an Educational Specialist I certificate, an individual must:

- I. Meet the competency requirements prescribed by the Pennsylvania Department of Education. These requirements generally are met by successfully completing a M.Ed. or M.S. degree in counselor education.

To be admitted to the master's program in counselor education at Penn State an individual must have completed 27 credits with grades that average 3.0 or better in courses distributed throughout such areas as sociology, psychology, economics, education, and anatomy and physiology. Also, a minimum junior-senior cumulative grade point average of 2.50 or better is required.

An individual may be admitted as a "Certification" graduate student and complete only the certification requirements, not the graduate degree requirements. These decisions are made on an individual basis within the Counselor Education program and are often based upon staff resources and student credentials.

The Educational Specialist I certificate is valid for six years of service in the area for which it is endorsed.

To obtain an Educational Specialist II (permanent) certificate, an individual must:

- I. Hold a valid Educational Specialist I certificate.
- II. Successfully meet the three year experience requirement as attested to by the counselor's employing school administrator.

This certificate is good for life.

RECERTIFICATION INFORMATION

There is no recertification of school counselors in Pennsylvania.

Continuing education requirements: none.

BACKGROUND INFORMATION

The certification requirements are developed by the State Department of Education which also approves the academic programs for the preparation of counselors. Typically, these programs are affiliated with graduate programs in counselor education. Most of the state colleges and several private institutions including Temple University, Villanova, Duquesne, Westminster, The University of Scranton, The University of Pennsylvania, and The Pennsylvania State University offer such programs.

CLIMATE FOR CONTINUING EDUCATION

Although there are no recertification requirements, most schools encourage their counselors to take additional credit courses. Salary scales with increases for additional education provide incentive for participation in this additional education. Some school districts will reimburse counselors for costs of continuing education.

The counseling field is a changing one, and thus continuing education is considered necessary if an individual is to remain up to date. Counselors also benefit from periodic work on their practical skills. Professional associations, such as the American Association for Counseling and Development and its subgroups on the state and national levels, provide some continuing education, as do colleges and universities with counselor education programs.

Penn State has offered several workshops for counselors. It has been suggested that counselors outside the school setting, such as those in collegiate, rehabilitation, and mental health facilities, also would benefit from the school counseling continuing education programs.

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EDUCATION INSTRUCTIONAL MEDIA SPECIALISTS

The Pennsylvania Department of Education (PDE) issues educational specialist certificates (I and II) for instructional media specialists working in public schools.

CERTIFICATION INFORMATION

An individual must first earn an Educational Specialist I (provisional) certificate, then may pursue an Educational Specialist II (permanent) certificate. To obtain an Educational Specialist I certificate, an individual must:

- I. Have successfully completed a PDE approved graduate certification program in instructional media.

This initial certification is good for three years.

RECERTIFICATION AND INFORMATION

After completing three years of satisfactory experience at level I, permanent (level II) certification is granted.

Continuing education requirements: none.

BACKGROUND INFORMATION

Instructional media specialists are primarily employed by school districts to design instructional programs utilizing various media resources. Instructional media specialists may also be employed in a school or intermediate unit instructional materials center. Certification is valid for all grade levels.

The demand for instructional media specialists in education has declined over the past few years after peaking in the late 60s to early 70s. As school budgets become tighter, support service positions, including instructional media specialist, are being cut as a fiscal measure. Because of this decrease in demand, many instructional media specialists are pursuing dual certification in areas such as library science or curriculum development to make them more valuable on the job market. However, outside the field of public education there is a substantial and increasing demand for instructional media specialists for industrial training. They do not require certification.

There are approximately 750 instructional media specialists practicing in the Commonwealth's public education system.

CLIMATE FOR CONTINUING EDUCATION

Pennsylvania schools offering certification programs in instructional media are Clarion University, West Chester University, Shippensburg University, Indiana University, Temple University, University of Pittsburgh, and Penn State. Some schools, such as Clarion University and Indiana University,

also have baccalaureate degree programs in instructional media for individuals going into industry.

PDE provides no formalized training specifically designed for instructional media specialists, although these individuals may participate in relevant inservice programs. They may also receive continuing education through the Pennsylvania Learning Resources Association, a professional association affiliated with the Association for Educational Communications and Technology, and in programs offered by the colleges and universities with certification programs in instructional media.

It appears that the primary updating occurring in the field is resulting from the trend to obtain dual certification. Another trend is for persons to prepare for business and industrial training positions; this requires some emphasis on instructional design.

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EDUCATION
PUBLIC SCHOOL TEACHING

The Pennsylvania Department of Education (PDE), Bureau of Teacher Preparation and Certification, issues Instructional I and Instructional II (Permanent) certificates to persons whose primary responsibility is teaching.

CERTIFICATION INFORMATION

An individual must first earn an Instructional I certificate, then may pursue an Instructional II certificate. To obtain an Instructional I certificate, an individual must:

- I. Earn a baccalaureate degree.
- II. Complete a PDE-approved teacher education program. This requirement may be met:
 - A. through a baccalaureate degree program in education, or
 - B. as a graduate degree candidate, or
 - C. as a non-degree graduate student seeking certification.
- III. Receive the recommendation of the appropriate administrator of a PDE-approved program.

At this point an Instructional I certificate is issued. It is valid for six years of full time teaching or substituting on a regular basis in Pennsylvania's public schools. (These need not be consecutive calendar years.) The Instructional I certificate may not be renewed.

For permanent certification to teach in Pennsylvania, an individual must earn an Instructional II certificate. To qualify for an Instructional II certificate, an individual must:

- IV. Hold a valid Instructional I certificate.
- V. Have taught in Pennsylvania for three years.
- VI. Have earned at least twenty-four post-baccalaureate collegiate or PDE "approved" in-service credits.

An individual currently certified to teach in another state may submit his/her credentials to the Bureau of Teacher Preparation and Certification. The Bureau evaluates out-of-state credentials and documentation of professional experience to insure that the Pennsylvania standards for certification have been met. If an individual holds a valid certificate from another state, the initial Instructional I certificate for Pennsylvania is generally issued.

In the case of an individual holding an expired certificate or not meeting all of the Pennsylvania standards, a course of action for obtaining the Instructional I certificate will be recommended. PDE may require the completion of one of more courses to fulfill the current standards, or individuals might be referred to a local teacher preparation instruction to complete an approved certification program.

RECERTIFICATION INFORMATION

There is currently no recertification of teachers in Pennsylvania.

BACKGROUND INFORMATION

The teacher certification procedures described above apply to all instructional areas, kindergarten through twelfth grade. All teacher education programs must be approved by PDE. In addition to having PDE approval, Penn State's programs are accredited by the National Council for Accreditation of Teacher Education.

All credits required for Instructional II certification may be earned through PDE-approved in-service training programs, institutions of higher education, or any combination of the two. This course work may be completed at the undergraduate or graduate level.

It should be noted that PDE also issues Master's Degree Equivalency Certificates for salary purposes only. Individuals holding Instructional I or II certificates are eligible for a Master's Degree Equivalency Certificate after earning thirty-six graduate level credits, with at least eighteen of these credits in the area of the applicant's primary teaching assignment. No more than eighteen of the thirty-six credits may be earned through in-service programs approved by PDE for this purpose.

CLIMATE FOR CONTINUING EDUCATION

Some states other than Pennsylvania recertify teachers every two or three years, with a continuing education requirement to be met. Pennsylvania currently is studying a continuing professional development requirement for all professional school personnel. They would be required to obtain six credit hours in approved in-service education courses or collegiate studies, or any combination thereof, every five years. This requirement would apply to all holders of Instructional II certificates who received their initial certificate after June 1987.

Because of the post-baccalaureate credit requirement for an Instructional II certificate, a certain amount of continuing education for teachers is mandatory. In addition, teachers participate voluntarily in continuing education to some extent.

Credits toward Instructional II certification and other continuing education are available to teachers through two major sources: PDE-approved in-service training programs and institutions of higher education.

PDE has drawn up guidelines for the development of in-service training programs by school districts or intermediate units. Determination of the number of credits to be given for in-service programs is made by PDE after an evaluation of the proposed program.

Proponents of continuing education programs offered through institutions of higher education believe that their approach offers a thorough coverage of an area, including theory and analysis of the concepts and problems being considered. Locally designed in-service training programs often meet short-term, narrowly defined, identified needs, whereas programs offered through colleges and universities tend to be broader and more comprehensive in scope.

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EDUCATION
SCHOOL ADMINISTRATORS

The Pennsylvania Department of Education (PDE) issues the following administrative certificates and letters of eligibility:

Elementary School Principal Certificate
Secondary School Principal Certificate
Director of Vocational Education Certificate
District Superintendent Letter of Eligibility
Assistant District Superintendent Letter of Eligibility
Intermediate Unit Executive Director Letter of Eligibility
Assistant Intermediate Unit Executive Director Letter of Eligibility

CERTIFICATION INFORMATION

To be certified as an Elementary/Secondary School Principal, an individual must:

- I. Complete a graduate program approved by PDE.
- II. Have five years of professional education experience.

To be certified as a Director of Vocational Education, an individual must:

- I. Complete a graduate program approved by PDE.
- II. Have five years teaching experience in vocational education.

To receive a District Superintendent Letter of Eligibility, an individual must:

- I. Complete a graduate program approved by PDE.
- II. Have eight years experience in education with at least three at a supervisory or administrative level.

To receive an Assistant District Superintendent Letter of Eligibility, an individual must:

- I. Complete a graduate program approved by PDE.
- II. Have six years teaching experience (this is for individuals lacking administrative or supervisory experience).

To receive an Intermediate Unit Executive Director Letter of Eligibility, an individual must:

- I. Meet ONE of these two options:
 - A. Have a doctoral degree from a state approved college or university; or

- B. Have a master's degree plus forty semester hours of graduate work taken at an institution approved for the preparation of a District Superintendent of Schools.
- II. Have six years experience in education with at least three at the managerial or supervisory level.

To receive an Assistant Intermediate Unit Executive Director Letter of Eligibility, an individual must:

- I. Meet ONE of these two options:
 - A. Have a doctoral degree from a state approved university; or
 - B. Have a master's degree plus forty semester hours of graduate work taken at an institution approved for the preparation of a District Superintendent of Schools.
- II. Have six years experience in education; managerial or supervisory experience is not required.

RECERTIFICATION

There is no recertification of school administrators. However, the initial certification or letter of eligibility is provisional for three years (Level I). After three years satisfactory performance at Level I, permanent (Level II) certification is granted.

Continuing education requirements: none.

BACKGROUND INFORMATION

The functions of the administrator are to direct, operate, supervise, and administer the organizational and general educational activities of a school or schools.

The size of the administrative staff varies by school district. There is a minimum of one principal per school and one district superintendent per school district. A building administrator, however, may be responsible for more than one building. As the size of the school or district increases, the number of assistants also increases.

For the 1978-79 school year, there were 2,532 elementary, 982 secondary, and 382 combined (both elementary and secondary grades) schools operating in Pennsylvania.

CLIMATE FOR CONTINUING EDUCATION

More than a dozen institutions in Pennsylvania currently are approved by PDE to provide certification programs for elementary school and secondary school principals; less than half of these institutions provide PDE approved programs for the Superintendent's Letter of Eligibility; and only a few schools offer approved programs for Director of Vocational Education certification. Temple University, University of Pittsburgh, and The Pennsylvania State

University offer programs for all three administrative levels. There are no formalized programs for the preparation of Intermediate Unit Executive Directors.

There is no mandated inservice training for school administrators. However, studies have shown that administrators feel a need for updating in their field, particularly in areas of budget management and school finance, energy management, education law, and personnel negotiations.

The training and educational needs of administrators vary depending on the size of the school or school district. For example, a superintendent of a small rural district may need to be more of a generalist while the superintendent of an urban district can delegate many responsibilities to a staff of assistants and concentrate his or her efforts on specific issues.

Training and updating opportunities for school administrators are available through several delivery systems. Formal and informal courses may be taken at colleges and universities. Educational programs and workshops are offered by professional associations such as the state principals associations and the Pennsylvania Association of School Administrators. The State School Board Association releases publications and information for administrators. PDE operates an Executive Academy, which provides problem solving sessions for interested school administrators.

Four study councils, located at the University of Pennsylvania, University of Pittsburgh, Lehigh University, and The Pennsylvania State University also offer workshops and programs. School districts, not individual administrators, may join any number of these study councils. Superintendents, I.U. executive directors, and their assistants are the main client groups. Some councils allow other individuals such as school board members and program coordinators to attend the sessions. The Pennsylvania School Study Council (PSSC) at Penn State has approximately thirty percent of the state's school districts as members.

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EDUCATION SCHOOL PSYCHOLOGISTS

School psychologists must be certified by the Pennsylvania Department of Education in order to be employed by a school district. School psychologists in private practice must be licensed by the State Board of Psychologist Examiners, or be supervised by a licensed psychologist, as described in the section of this manual on psychologists.

CERTIFICATION INFORMATION

School psychologists must hold an Educational Specialist I or II certificate. To obtain an Educational Specialist I (provisional) certificate, an individual must successfully complete an accredited sixty hour graduate program in school psychology, including 1,000 hours of supervised work with preschool and school age children and youth; their parents, teachers and other significant adults.

The Educational Specialist I certificate is valid for three years.

To obtain an Educational Specialist II (permanent) certificate, an individual must:

- I. Hold a valid Educational Specialist I certificate.
- II. Successfully complete three years of supervised experience as attested to by the psychologist's employing school administrator.

This certificate is good for life.

School psychologists from out of Pennsylvania may apply for certification directly to the Department of Education.

RECERTIFICATION INFORMATION

There is no recertification of school psychologists in Pennsylvania.

Continuing education requirements: none.

BACKGROUND INFORMATION

In 1979-80, there were approximately 1,600 certified school psychologists in Pennsylvania, 659 of whom were employed as psychologists in Pennsylvania schools. Psychologists working in school settings test and evaluate children, particularly to meet the requirements for special education and gifted programs, do counseling, and consult with community members, parents, and school personnel. School psychologists are involved in due process proceedings for children. Certified school psychologists with other areas of certification may work in such educational specialties as pupil personnel services. Psychologists also may be engaged in private practice if they are licensed or work under the supervision of a licensed psychologist.

All certification programs in Pennsylvania institutions must be approved by the Pennsylvania Department of Education (PDE). Schools which offer accredited programs include Bryn Mawr College, Bucknell University, California University, Duquesne University, Edinboro University, Indiana University of Pennsylvania, Lehigh University, Marywood College, Millersville University, The Pennsylvania State University, Temple University, University of Pennsylvania, and University of Pittsburgh. Two additional accreditation mechanisms exist through the American Psychological Association (APA) and the National Council for Accreditation of Teacher Education (NCATE). Penn State's program is approved by PDE, APA, and NCATE. NCATE accreditation assists in obtaining reciprocal certification in other states. APA approval assists in obtaining reciprocal licensing in other states.

Penn State's graduate program leads to certification and a doctorate, and admission is based on a combination of scholastic average, references, and test scores. An undergraduate background emphasizing psychology and/or special education is preferred.

There are two national professional organizations for school psychologists, both of which have Pennsylvania affiliates. The largest national group of psychologists is APA, with a division specifically for school psychologists. The Pennsylvania Psychological Association (PPA) is its associate at the state level. A newer organization, the National Association of School Psychologists (NASP), represents a substantial number of school psychologists; members generally do not agree with APA's emphasis on doctoral degrees and its orientation towards specializations in addition to school psychology. A newly formed Pennsylvania organization, the Association of School Psychologists of Pennsylvania (ASPP), is affiliated with NASP.

CLIMATE FOR CONTINUING EDUCATION

School psychologists might participate in continuing education programs for several reasons. They need to have current and accurate information on mandated programs, due process procedures, and other legal aspects of school psychology. School psychologists are also interested in updating their techniques, developing new ones, and learning of trends within the field of general psychology as well as school psychology. Continuing education programming in other specialty areas such as marriage counseling would be particularly helpful for licensed school psychologists wishing to engage in private practice with a focus other than school psychology. Master's level psychologists might participate in continuing education if the coursework were part of a doctoral program, since only about 10 percent of all school psychologists have doctorates. The University of Pittsburgh and Indiana University of Pennsylvania offer such a program on a part time basis.

Penn State's doctoral program requires one year of a supervised internship beyond certification. Because in-service training should be a strong part of this internship, and interns are scattered throughout the state, there might be a need for some type of innovative continuing education programming.

Currently there is not much continuing education available to school psychologists within Pennsylvania. An annual fall conference for school psychologists hosted by Penn State attracts about 200 participants each year.

Intermediate units provide some continuing education through in-service training and other meetings; these often deal with legislative issues. PPA holds two conferences annually, but plans to expand its continuing education programming by offering workshops at locations throughout Pennsylvania.

Although APA approval of continuing education sponsors is considered desirable, there are just three APA-approved sponsors in Pennsylvania: Western Psychiatric Institute, PPA, and the Pennsylvania State University Consortium of the Department of Psychology, Division of Human Development and Family Studies, and Division of Counseling and Educational Psychology. If continuing education becomes mandatory for psychologists, attendance at APA-approved programs will be accepted most readily as evidence of meeting the requirements established. Even without a continuing education requirement, psychologists are probably more likely to attend APA-approved continuing education programs.

NASP has standards for credentialing which include continuing education requirements, but because most state departments of education do not recognize the standards, the Association's requirements are somewhat meaningless.

Penn State has a psychology course number (School Psychology 497) which was developed for use in offering continuing education credit courses. There appears to be some eagerness from school psychologists to participate in programming which would yield credits or CEUs. Because the total number of school psychologists is small, however, it might be necessary to conduct such courses or programs in major cities, or to employ correspondence study, cassettes, or other self-study mechanisms to reach the diverse audience.

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EMERGENCY MEDICAL TECHNOLOGY

Voluntary certification for Emergency Medical Technicians (E.M.T.s) is provided by the Pennsylvania Department of Health. However, this certification may be a mandatory requisite to work with a county or local emergency service squad. National voluntary certification also exists for E.M.T.s but it is not recognized by the State Department of Health.

BACKGROUND INFORMATION

E.M.T.s do not fall into the traditional definition of an occupation primarily because the vast majority of E.M.T.s are volunteer workers. In Pennsylvania, approximately 80 percent of those serving as E.M.T.s are volunteers. Because of this, the motivation of individuals who fill E.M.T. roles affects their perspective and ability to participate in training and education programs. The time invested in training is not necessarily seen in the same terms as time invested in training for a paying job.

There are two levels of E.M.T.s; the basic level is the E.M.T., the advanced level is the paramedic. Requirements to become an E.M.T. are standardized by the State Department of Health. Requirements to become a paramedic parallel those of the E.M.T., but require three or four times the time commitment. Specific content of the paramedic course may vary from community to community based upon the input of the course medical director.

To become a State Department of Health certified E.M.T., an individual must:

- I. Have a minimum of 120 clock hours of training in several areas including patient assessment, basic life support, oxygen administration, and fractures.
- II. Pass a two part examination: skills (practical) and written. The written part can be taken only if the practical part has been passed. If the practical is not passed, one retake is allowed. One retake is also allowed on the written part. Otherwise, an individual must go through the training program again.

Certification is good for three years.

To be recertified, an individual must:

- I. Take a retest by one of the following options:
 - A. Take a two-part challenge examination (skills and knowledge). No retest is allowed on either part. If it is failed, the individual must take a refresher course. The refresher course varies from a minimum of twenty to a maximum of forty hours.
 - B. Take a refresher course and pass the certification examination.
 - C. E.M.T. instructors need only pass the written portion of the challenge examination.

An estimated 80 percent of ambulance operators in Pennsylvania are certified E.M.T.s. Since 1972, approximately 30,000 E.M.T.s have been certified in the Commonwealth, although only about 18,000 have maintained certification. There is approximately a 50 percent turnover rate every two to three years. This high attrition is attributed to the intensity of the job and the lack of opportunity for advancement.

CLIMATE FOR CONTINUING EDUCATION

All training programs for E.M.T.s are coordinated and administered by sixteen regional Emergency Medical Service (EMS) councils. These councils are in turn responsible to the State Department of Health. Approximately 300 to 400 classes are given per year throughout the state. These classes are offered at vo-tech schools, community colleges, hospitals, and local ambulance clubs. Penn State offers courses for both E.M.T.s and paramedics.

The cost of these training courses varies from free to the cost of tuition for a college credit course. It is difficult to expect volunteer workers to pay for their training when it can be received free from an EMS council. Very few communities underwrite the cost of providing training for ambulance personnel; however, many ambulance organizations may provide reimbursement for some training courses.

The Pennsylvania Ambulance and E.M.T. Association, which is affiliated with The National Association of E.M.T.s, has provided some continuing education for E.M.T.s. However, attendance at its conferences has dropped in the past couple of years. This decrease has been attributed to the conference costs that an E.M.T. must pay to attend.

The E.M.T. course offered at Penn State is held at University Park. Plans are underway to expand the course to other locations in the state. These efforts are limited by financial resources as new training equipment will have to be purchased.

It has been suggested that continuing education field staff members work with the community to help plan and develop programs of this type when the need is shown to exist. The greatest demand tends to be for paramedic training, due to the desire for higher certification levels. Postcertification programs are in less demand because of the absence of Pennsylvania Department of Health continuing education requirements.

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ENGINEERING

The Pennsylvania State Registration Board for Professional Engineers licenses engineers under the general designation of "Professional Engineer." Licensing examinations currently are given in the following disciplines:

Aeronautical/Aerospace Engineering	Industrial Engineering
Agricultural Engineering	Manufacturing Engineering
Ceramic Engineering	Mechanical Engineering
Chemical Engineering	Metallurgical Engineering
*Civil Engineering	Mining/Mineral Engineering
Electrical Engineering	Nuclear Engineering
Fuel Technology	Petroleum Engineering
Geological Engineering	*Sanitary Engineering
	*Structural Engineering

* One combined examination covers these disciplines.

LICENSING INFORMATION

To be licensed, an individual must:

- I. Be twenty-five years of age, of good character, and able to speak and write the English language.
- II. Pass the Engineer in Training (EIT) examination common to all disciplines. To be eligible to sit for this examination, an individual must pay a fee and either:
 - A. Be a graduate of a four-year or more engineering or engineering technology program in an approved institution of higher education, or
 - B. Have four years of engineering experience, as attested to by a Professional Engineer.
- I. Pass the Professional Engineer (PE) examination in his/her discipline. To be eligible to sit for this examination, an individual must have four years of engineering experience and pay a fee.

An individual holding an unexpired license or certificate of registration issued by the proper authority of another state, territory, or country having requirements comparable to those in Pennsylvania may be licensed in Pennsylvania without examination.

RELICENSING INFORMATION

To maintain licensing, an individual must renew the license biennially by paying a fee. Licensing periods run from December 1 of each even-numbered year to November 30 two years hence.

Continuing education requirements: none.

BACKGROUND INFORMATION

Beginning April, 1979, the State Registration Board for Professional Engineers in Pennsylvania changed from state-designed PE examinations to the National Council of Engineering Examiners (NCEE) examinations. These examinations, given in April and November of each year, are used by fifty-one states and territories. The only state-designed examinations used are for the specialties of fuel technology and geological engineering.

NCEE designs and grades all PE examinations, and makes recommendations regarding what might constitute a passing score. Examinations are administered by a testing service, under contract to the Board. Each state may define its own passing score, but in the interest of simplifying reciprocity rulings, states tend to follow NCEE's recommendations. Pennsylvania is using the NCEE-recommended passing score. The Educational Testing Service prepares and grades all EIT examinations.

The Professional Engineers Registration Law is a practice act designed to protect the public. All persons engaged in the practice of engineering must be licensed Professional Engineers, except those employed in industry or public utilities. Engineers in these two areas are exempt from the Professional Engineers Registration Law, but each industry or public utility engaged in engineering work must have one Professional Engineer on its staff who is designated "engineer in responsible charge." Exemption of engineers employed by industries and public utilities is based on the fact that these organizations are engaged in product engineering rather than in public engineering; therefore their work does not directly affect the public.

Some states license engineers from all disciplines under the general designation of Professional Engineers, while others license them as professional engineers in a specified discipline. Pennsylvania uses only the general designation, so theoretically a licensed Professional Engineer could work in any engineering discipline. However, the Professional Engineers' code of ethics, as well as public acceptance, prevents engineers from practicing in areas in which they are not competent.

The National Society of Professional Engineers is the nationwide professional organization, and the Pennsylvania Society of Professional Engineers (PSPE) is a member of that organization. There are approximately 28,000 Professional Engineers currently licensed in Pennsylvania. Of these, approximately 17,000 are Pennsylvania residents. The remaining 11,000 live outside of the state but maintain licensure in Pennsylvania. Approximately 5,000 of the Professional Engineers residing in Pennsylvania are members of PSPE.

In addition to the professional organization each discipline has its technical society (e.g., American Society of Mechanical Engineers). These also are national organizations with regional and local sections.

CLIMATE FOR CONTINUING EDUCATION

Because the field of engineering is moving rapidly, engineers must make an effort to remain current; they cannot do their job, and people will not hire them, if they fail to do so. For this reason, Professional Engineers engage in continuing education activities voluntarily, and in fairly large

numbers. PSPE encourages its members to participate in continuing education activities, and offers quite an extensive range of programs. The technical societies also have large continuing education programs. Penn State and other institutions of higher education also offer continuing education programs for engineers.

Continuing education programs offered at organizations' meetings or in metropolitan areas appear to be the most successful; a critical mass of Professional Engineers is of course necessary to warrant offering a program. This is also true for courses designed to prepare engineers for the PE examination.

Mining engineering and nuclear engineering are two disciplines with particular implications for continuing education at Penn State. Penn State's resident instruction and research programs in these two fields are unique in the state, and because of this, Penn State represents a center of expertise in terms of faculty and equipment (e.g., the Breazeale Nuclear Reactor Facility is the only research and training reactor in Pennsylvania and New Jersey). Therefore, Penn State is able to offer continuing education programs that utilize these capabilities.

In addition to these factors, nuclear engineering is a relatively new discipline. As such, it is experiencing a wide-spread, rapid growth of information, making continuing education almost essential for anyone working in the field.

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FORESTRY

There is no mandatory licensure or certification of professional foresters in Pennsylvania.

BACKGROUND INFORMATION

Approximately one half of the nation's foresters are government-employed. In Pennsylvania, federal forestry opportunities are primarily limited to the Allegheny National Forest. The largest state employer of foresters is the Pennsylvania Bureau of Forestry. Other prominent government employers include wildlife management agencies, recreation and parks bureaus, and soil conservation units. Foresters also find a considerable number of employment opportunities in the private sector. The major sources include forest product industries, public utilities, forestry consultants, and engineering firms dealing with natural resources management.

Nationally, there are from 800 to 1,200 new forestry graduates a year; about forty of those are from Penn State, which has the only accredited four-year and graduate forestry programs in the Commonwealth. Penn State's Mont Alto campus and Williamsport Area Community College offer two-year technician programs in forestry. In recent years 60 percent of Penn State's four-year program graduates have obtained professional employment within one year of graduation, and an additional 10 to 15 percent have pursued advanced degrees in forestry and allied fields. Close to 100 percent of those with advanced degrees are professionally employed after graduation.

To work for the Federal Forestry Service, an individual must meet U.S. Civil Service qualification standards. There are two options for meeting the basic requirements for all professional forestry grades.

- I. Have a baccalaureate or graduate degree from an accredited college or university with major study in forestry or a closely related subject matter field which includes at least thirty hours in any combination of biological, physical or mathematical sciences or engineering, of which at least twenty-four hours of work are in forestry, or
- II. Have at least thirty hours of coursework from an accredited college or university in any combination of biological, physical or mathematical sciences or engineering, of which at least twenty-four hours are in forestry, PLUS additional education or experience which, when combined with the thirty hours of coursework, will total four years of education or four years of combined education and experience.

There are additional experience and training requirements for higher grades. As the forester advances in levels of responsibility, he or she is expected to participate in continuing professional development as a method of keeping updated.

To work for the Commonwealth as a professional forester, one must meet minimum State Civil Service requirements; there is no fee for application. An applicant must:

1. Be a Pennsylvania resident, of good moral character, and physically capable of performing the duties of the position.
2. Have a baccalaureate degree with major course work in forest management from a college or university accredited by the Society of American Foresters. Copies of official college transcripts must be submitted with the application.
3. Possess knowledge of basic disciplines of forest management, horticultural and agronomical theories and practices pertaining to forest tree nursery management, the operation of power equipment used in the logging of timber, and road construction and maintenance.
4. Have skill in the use of all standard surveying instruments.
5. Possess the ability to learn new principles and current practices involved in the technical area assigned, secure and analyze facts through research and investigation and exercise sound judgment in arriving at conclusions, and establish and maintain good working relationships with work associates and the general public.

An examination is made of the applicant's record of education and experience. The applicant is then rated. Employment lists are established ranking successful applicants in order of their final earned ratings.

Licensing has been debated among foresters. In Pennsylvania, several bills have been introduced over the past decade to provide for either registration or licensing of foresters, but none have been successful. Proponents stress that licensing will protect the public from incompetent foresters or imposters. Opponents of licensing acknowledge the potential for this problem but maintain that the number of individuals affected is negligible and that the specific requirements often attached to licensing would be difficult to apply in a profession as diverse as forestry.

CLIMATE FOR CONTINUING EDUCATION

As the forestry profession continues to specialize, the potential for continuing education increases. Penn State has offered various continuing education programs, including symposia on genetics, forest hydrology, and reclamation of disturbed lands. A two-week program in Administrative Management for Resource Managers is offered every year in December at University Park, and is geared towards the development of management skills in the forestry profession. The School of Forest Resources recently provided several two-week forest management programs for the U. S. Forest Service to update their key administrative personnel concerning the technological changes inherent to their profession. Penn State's Cooperative Extension Service also offers forestry-related programs to land ownership groups, industry units, and professional audiences concerned with the management and use of forest resources.

Other continuing education opportunities for foresters include regional, two- to three-day meetings produced by the U.S. Forest Service and allied agencies. These meetings are sometimes open to professionals outside the federal service. Also, the Society of American Foresters coordinates various scientific meetings, but as a rule does not offer formal educational programs. However, local and regional chapters of this organization have sponsored seminars and workshops concerning forest management issues and practices.

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FUNERAL DIRECTION

The Funeral Director Law regulates the licensure of persons engaged in the preparation and disposition of the bodies of deceased persons in Pennsylvania. The State Board of Funeral Directors administers and enforces this Law.

LICENSING INFORMATION

To be licensed as a funeral director, an individual must:

- I. Be at least twenty-one years of age and of good moral character.
- II. Be a high school graduate.
- III. Complete at least two years or sixty hours of college course credits.
- IV. Complete at least one year as a student trainee in an approved mortuary school, after which a six hour, comprehensive national written examination must be passed.
- V. Complete at least one year as a resident intern working under a registered preceptor in a funeral establishment.
- VI. Apply for and pass a written, oral, and practical state examination. Application must include case histories of fifty bodies cared for by the applicant, including all aspects of embalming and working with the bereaved families and the deceased, and payment of a fee.
- VII. Pay a licensing fee.

The widow or estate of a deceased funeral director shall receive a restricted license to continue operation of the deceased's establishment.

RELICENSING INFORMATION

Licenses expire February 1 of each even-numbered year, and may be renewed by payment of a fee.

Continuing education requirements: none.

BACKGROUND INFORMATION

The funeral director of today is viewed as a new entity. The family business, passed on from generation to generation, has all but disappeared. Changes have also occurred in the science and technology of funeral directing. Pennsylvania's requirement of sixty college credits for licensure is somewhat unusual, but is designed to meet the needs of the modern funeral director by providing him/her with a general education.

The sixty credits required for licensure may be in any subject area. However, it is suggested that students interested in becoming funeral

directors should concentrate on the sciences, including pathology, physiology, and anatomy; bookkeeping; business law; management; sociology; and psychology.

The student who has completed sixty or more credits may apply for a student traineeship at one of about twenty-five schools in the country. There are two schools of mortuary science in Pennsylvania, one in Pittsburgh and a newly established one in the Bethlehem area. Because of the variation in state laws, a student should attempt to attend school in the state in which he/she wishes to practice whenever possible. Screening for mortuary school is not terribly comprehensive, but usually a 2.4 or 2.5 average and an interview are required. The Board registers all applicants for student traineeships, and there is an annual registration fee.

Upon completion of the student traineeship and passage of the national examination, a student must find his/her own internship. The Board registers interns, for which an annual fee is charged. This phase of training is completed under the supervision of a licensed funeral director in good standing who has registered with the Board to serve as preceptor for one student intern or more, and has completed the required preceptor's course. The course is a twelve-hour seminar given or approved by the Board. It is good for five years. The internship is to consist of twelve full, continuous months with a minimum of forty hours of experience per week. The state examination given at the conclusion of the internship is 15 percent oral, 15 percent practical, and 70 percent written. Applicants must maintain an average of 70 percent in the three sections of the examination.

There is an extremely high turnover of people working in this field. In the five year period following entrance into a student traineeship, a majority of the people leave the profession. Attrition continues after this period, but at a slower rate. Because of this large turnover, there is always a demand for funeral directors. Supply and demand in the field remain fairly even, however. The high attrition rate is attributed largely to the degree of job dedication, or involvement, that is required of funeral directors. Scheduling is virtually unheard of in this field, since timing of work is totally unpredictable. A funeral director must always be available within twenty to thirty minutes, and is on call at all hours. Attempts are being made to provide funeral directors with some personal time through the use of better scheduling and electronic technology, such as telephone call forwarding. However, time demands always will be great.

The license granted by Pennsylvania is that of "funeral director and embalmer." Such dual licensure is employed to assure that a funeral director is qualified in all aspects of his/her work. The three major thrusts are funeral directing and counseling, care of the deceased, and mortuary management. A funeral director may engage in practice in only one location at a time, but may assist at a branch location of the same business.

The Pennsylvania Funeral Directors Association is a chapter of The National Funeral Directors Association. Both professional associations meet once yearly. In Pennsylvania there are also twelve district associations which meet every two months. In addition to the groups, which are open to all licensed funeral directors, there are several invitational groups. These groups are somewhat political in nature, and members refer out-of-town work to other members of their organization.

In an effort to standardize funeral direction service nationwide, the Federal Trade Commission passed an act on June 1, 1984. The specific rules and regulations to be implemented have yet to be issued.

CLIMATE FOR CONTINUING EDUCATION

While continuing education is not required for practitioners at this time, legislation mandating it is expected to be introduced. There have been attempts to enforce a periodic education review of licensed practitioners, with thirty hours of continuing education every four years as the recommended requirement. Voluntary continuing education participation is significant, with programs being provided by mortuary schools and the state and national professional associations.

The changing nature of funeral directors (as described earlier) and their interest in both voluntary and mandatory continuing education suggest a need for general educational programs in the biological sciences, psychology and sociology, and business law and management.

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HEALTH SERVICES ADMINISTRATION

There is no mandatory licensure or certification of health services administrators in Pennsylvania, with the exception of nursing home administrators, described elsewhere in this report.

BACKGROUND INFORMATION

Health services administrators direct the various functions and activities that make a health organization run smoothly and efficiently. From the largest general hospital to the smallest walk-in clinic, health administrators provide effective management under the supervision of a board of directors or other governing body. They are responsible for many kinds of management decisions regarding personnel, budgets, facilities planning, and departmental operations. In small organizations, administrators must be generalists; in larger ones, they often delegate the supervision of daily operations to assistant administrators. In addition to their regular management activities, many health administrators organize fund raising drives and promote public participation in health programs. They also may represent the interests of their organization on a regional health planning board.

The majority of health administrators work in out- and in-patient care facilities such as hospitals, clinics, nursing and personal care homes, and health management firms that provide administrative services for a fee. Others work for governmental organizations or for voluntary health agencies such as the American Cancer Society or the Heart Fund.

Educational requirements for health services administrators vary according to the size and nature of the employing organization and the position's relative level of responsibility. In general, larger organizations with a more complex administrative structure require more education than do smaller units. A master's degree in public health or hospital administration is the preferred preparation for the position of chief, associate, or assistant hospital administrator. Graduates of master's degree programs in public administration or business management with health care experience also are hired for these positions. Administrative assistant or department head positions in hospitals generally require at least a baccalaureate or associate degree in health care administration, or a baccalaureate degree in business administration and training or experience in health care. Career advancement without a master's degree is becoming uncommon.

Pennsylvania universities that offer master's degrees in public health/hospital administration include the University of Pennsylvania, the University of Pittsburgh, and Temple University. These programs emphasize a residency and practicum experiences in at least two different settings, including health care and a related area such as health insurance, health planning, or public health. Penn State offers advanced degrees in the health planning and administration option of the community systems planning and development program. There is a required, non-credit practicum.

The major professional associations for health services administrators are the American Hospital Association (AHA) with its Pennsylvania affiliate, the Hospital Association of Pennsylvania (HAP) for administrators of all kinds; the American Public Health Association (APHA) for public health

administrators and educators; the Federation of American Hospitals for proprietary hospitals; and the American College of Hospital Administrators (ACHA) for upper level administrators. All of these associations hold annual conferences and publish journals and/or newsletters for their members. Since there are so many different areas of specialization within health services administration, the associations are usually divided into subsections representing types of settings or concerns such as out-patient and primary care facilities, human resources, material management, medical education, and hospital security.

Membership in ACHA resembles certification designations offered by associations in other professions. A person desiring membership must possess a specified combination of academic degrees and work experience to qualify as a nominee. After a nominee period of three years, ACHA grants formal membership to those nominees who successfully complete oral and written examinations. Three approved references and an annual fee also are required for admission. ACHA membership is widely recognized as a mark of professional distinction.

CLIMATE FOR CONTINUING EDUCATION

Many health care organizations allocate a substantial portion of their budget to staff development. Human resource managers often hire consultants and purchase training modules to present in-house programs that are relevant to all levels of the management team.

Other leading providers of continuing education for health services administrators are the professional associations. AHA and its subsections sponsor conferences throughout the country at different times of the year. ACHA regularly holds seminars and forums on strategic management and other timely issues for health administrators; they are open to members and non-members. ACHA's annual Congress on Health Care in Chicago draws a national body of administrators together for four days of intensive classroom training in specific areas of interest. ACHA requires its members to participate in continuing education in order to maintain membership. In conjunction with its annual conference, APHA provides continuing education institutes and sessions on topics such as basic financial management in health care, research utilization, grants writing, and utilization of pharmacist's services, offering continuing education units to those who participate. Many administrators also take advantage of the American Management Association's programs for managers in the public sector.

HAP's educational division is an active provider of regional professional development programming in areas such as cost report preparation and reimbursement, accreditation for laboratory services, and medical staff credentialing and privileges. Another regional provider is the National Health Care Management Center of the University of Pennsylvania, established in 1976 by the Department of Health and Human Services to improve the quality, quantity, and relevance of health services research in the United States. The leading commercial provider of continuing education for health services administrators is the Aspen Systems Corporation in Maryland. This organization offers seminars in different geographic areas on topics such as "cost containment through material management."

The University of Pennsylvania, University of Pittsburgh, and Penn State are among the eastern academic institutions offering continuing education for health services administrators. Harvard University and Cornell University also hold intensive management development short-courses for health care personnel.

Training in specialized areas of public health administration also is available from regional training institutes funded by the Department of Health and Human Services. Training III, an institute sponsored by the Family Planning Council of Southeastern Pennsylvania and located in Philadelphia, is one example. The National Center for Health Statistics in Washington, D.C. trains health administrators and planners in the use of statistics in health care and planning.

There is a smorgasbord of professional development opportunities open to health services administrators. However, the diversity of content areas is not matched by a diversity of delivery modes. Upper level administrators may not always have the time to travel great distances for conferences. The repackaging of existing instruction into videocassette, interactive television, or correspondence form could make it more convenient for them. Two major purposes of continuing education in health services administration are to keep abreast of the latest developments in the field and to move from a clinical to a managerial role. Suggested topics include labor-management relations, government regulations (especially the DRG system), understanding health care computer systems, fundraising, marketing, risk management and cost containment, supervising professional employees, and new technology in health care.

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INSURANCE
AGENTS AND BROKERS

Insurance agents and brokers must be licensed by the Pennsylvania Insurance Department to sell insurance in Pennsylvania.

LICENSING INFORMATION

To be licensed as an agent, an individual must:

- I. Be sponsored by an insurance company.
- II. Be a Pennsylvania resident.
- III. Be at least eighteen years of age.
- IV. Be of good business reputation.
- V. Pass the examination(s) for the line(s) of insurance he/she wishes to handle.
 - A. Examinations may be taken in any or all of the following areas:
 1. Life.
 2. Accident and health.
 3. Property and allied lines.
 4. Casualty and allied lines.
 - B. The examination fees are set by the Department.
- VI. Have the sponsoring insurance company submit a New Agent Application and the individual's examination scores to the Pennsylvania Insurance Department. No fees accompany this application; the insurance company is billed for all fees.

To be licensed as a property and casualty broker, an individual must:

- I. Meet ONE of the following sets of requirements:
 - A. Have been continuously licensed in Pennsylvania as a property and casualty agent for at least two years immediately preceding application, or
 - B. Have been continuously licensed in Pennsylvania as a property and casualty agent for at least one year immediately preceding application and have successfully completed an educational course approved by the Pennsylvania Insurance Department, or
 - C. Have been continuously licensed as a property and casualty broker in another state for two of the three years immediately preceding application, or

D. Hold the Chartered Property Casualty Underwriter (CPCU) designation.

II. Pass both the property and the casualty examinations. A CPCU may waive these examinations. Examination fees are set by the Department.

III. Complete an application for licensing as a broker, including endorsement by two other agents.

To be licensed as a life, accident, and health insurance broker, an individual must:

I. Meet ONE of the following sets of requirements:

A. Have been continuously licensed in Pennsylvania as a life agent for at least three years immediately preceding application, having been actively engaged in the sale of life or health insurance contracts during at least two of such three years; or

B. Have been continuously licensed in Pennsylvania as a life agent for at least two years immediately preceding application, having been actively engaged in the sale of life or health insurance during at least one of such two years, and have completed an educational course approved by the Pennsylvania Insurance Department; or

C. Have been continuously licensed as a life and health agent in another state for at least three years immediately preceding application, having been actively engaged in the sale of life or health insurance during at least two of such three years; or

D. Hold the Chartered Life Underwriter (CLU) designation.

II. Pass both the life and the accident and health examinations. A CLU may waive these examinations.

III. Complete an application for licensing as a broker, including endorsement by two other agents.

RELICENSING INFORMATION

To be relicensed, an agent's insurance company must pay a fee for him/her every two years. Licenses expire as follows:

I. Life, accident, and health--March 31, odd-numbered years.

II. Property and allied lines--September 30, even-numbered years.

III. Casualty and allied lines--December 31, odd-numbered years.

To be relicensed, a broker must biennially pay one fee if licensed as an individual broker, another fee if licensed in a partnership or corporation. Property and casualty brokers' licenses expire May 31 of odd-numbered

years. Life, accident, and health insurance brokers' licenses expire January 1 of even-numbered years.

Continuing education requirements: none.

BACKGROUND INFORMATION

The insurance agent and broker examinations are all given and scored by Educational Testing Service. They are given at eight locations in Pennsylvania (Allentown, Erie, Harrisburg, Johnstown, Philadelphia, Pittsburgh, Scranton, and Williamsport) on the second and fourth Saturdays of each month, and periodically on Mondays in Harrisburg for those who cannot be tested on Saturdays. Walk-in testing is permitted on a space-available basis on Saturday test dates. A licensed agent must sponsor each applicant for agents' examinations. An individual may sell only those lines of insurance for which he/she has passed the examination and been licensed.

The agent and broker examinations contain two parts. One part covers basic contractual law which applies to all states. The second part contains questions specific to Pennsylvania contractual law. Although brokers take the same examinations as do agents, they must achieve a higher passing score.

The life insurance field is one that may be considered easy to enter, but remaining in it is apparently more difficult; the majority of new agents hired are unable to survive past five years. Because the insurance business is volume-oriented, and volume is in large part a function of the number of agents, some insurance companies may consider easy licensing desirable. Once an individual has been licensed, however, he/she should participate in and receive strong support for further training and education. Some insurance companies are prone to encourage learning, and will often pay for courses, books, and/or the individual's time.

The insurance profession is frequently bifurcated, with the life and health industry often operating differently than the property and casualty fields. Many of the life insurance companies encourage voluntary participation in continuing education, and support programs that recognize self-improvement, education, and accomplishments of insurance agents and brokers. Among these programs are CLU, Fellow of Life Management Institute (FLMI), and the Million Dollar Roundtable.

The CLU is one of the programs that are sponsored by the American College, a fully accredited, non-resident College located at Bryn Mawr, Pennsylvania and accredited by the North Central Regional Accreditation Association. It is supported by revenues from its programs and sales of course guides, with occasional donations from insurance companies or individuals. To become a CLU, an agent or broker must be twenty-one years of age, have three years of professional insurance experience, and enroll in a thirteen-course program. Each course has an examination which must be passed. The courses include taxes, estate planning, pensions, group insurance, law, economics, finance, employee benefits, group insurance, and accounting. Preparation for CLU examinations ranges from self study to organized classes offered by insurance companies, CLU chapters, and universities in metropolitan areas. The American College also offers intensive learning programs. Individuals beginning the CLU program can usually complete it in three to five years.

Another professional designation for managers and technical/professional personnel in the life insurance field is the FLMI, sponsored by Life Management Institute. The FLMI designation is earned by successfully completing a series of nine three-hour examinations. Although there is no requirement of classroom study, and many students study independently, an increasing number of classes are being organized by companies, FLMI societies, and universities. The Institute itself does not conduct classes or correspondence courses.

Property, casualty, and allied lines of insurance are sold according to two distribution systems. Some agencies, especially those specializing in personal insurance, operate according to the agency system used in the life industry. Historically, however, property, casualty, and allied lines have been characterized by the independent agent, and this type of operation is still dominant in commercial insurance and is seen frequently in personal insurance. An independent agency becomes an asset; the list of customers and other facets of the business belong to the agent or broker (rather than to a company), and can be sold.

The CPCU designation for property and casualty agents and brokers and management personnel is comparable to the CLU. The requirements, standards, and format for becoming a CPCU parallel those for becoming a CLU. The CPCU program is administered by the Insurance Institute of America and the American Institute for Property and Liability Underwriters in Malvern, Pennsylvania. These institutes also offer a program in general insurance; associate certificates in claims management, risk management, underwriting, loss control management, premium auditing, and research and planning; and an accredited adviser in insurance program.

Insurance agents and brokers tend to specialize in either the life or non-life lines. Some companies that offer all types of insurance expect their personnel to be qualified in all lines, however.

The insurance profession does not have a single professional organization. Different lines and specialties have their own organizations. Pennsylvania is somewhat unique in that it does have a single organization that includes all segments of the profession, the Insurance Federation of Pennsylvania. This is primarily a lobbying and public relations organization, and does not provide educational programs.

Independent agent organizations in several states have supported stronger licensing laws, and they have made some gains. There has been talk of requiring college contact courses for licensing.

CLIMATE FOR CONTINUING EDUCATION

There is strong feeling within the Division of Agents and Brokers of the Insurance Department that continuing education is essential for persons working in the insurance profession. They cite the rapidly changing nature of the insurance field, caused by high crime rates, rising costs of living, and changing government regulations, as a major reason for agents and brokers to participate in continuing education programs. Discussions concerning the implementation of mandatory continuing education for relicensure have taken place among insurance agencies, agent associations, industry officials, and members of the commissioner's office. However, at the present time no

mechanism exists for maintaining the records necessary to monitor compliance with a mandatory continuing education requirement.

The lack of a continuing education requirement is perceived by some as being responsible, at least in part, for the high turnover rate of insurance professionals cited above. Many insurance companies hire new agents but provide them with little or no training. Hence these individuals do not have the information or the skills necessary to succeed in the profession.

For those agents and brokers who voluntarily participate in continuing education, there are programs available. Some individual insurance companies provide continuing education for their employees, and various professional associations also hold continuing education programs. Penn State has offered a number of programs over the years, and continues to do so.

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INTERIOR DESIGN

There is no legal requirement for licensure or certification of interior designers in Pennsylvania or elsewhere in the country at this time, although title acts restricting the use of the title, "interior designer," have been passed in Connecticut, Alabama, and Louisiana. A single, nationally recognized, definitive professional designation is granted by the American Society of Interior Designers (ASID) upon fulfillment of specified requirements that are quite similar in nature to the credentialing requirements for licensure in other professions.

BACKGROUND INFORMATION

ASID offers professional membership and designation to qualified interior designers. It was formed January 1, 1975, by the consolidation of the American Institute of Interior Designers (AID) and the National Society of Interior Designers (NSID). There are forty-six chapters of ASID within the United States; two of these are in Pennsylvania, in Pittsburgh and Philadelphia. ASID has over 23,000 members in a variety of membership categories.

Sixty-six schools in the United States offer programs accredited by the Foundation for Interior Design Education Research (FIDER). Some of these are design schools, but most are four-year institutions offering a baccalaureate degree. Traditionally interior design programs have been in the land-grant universities, where they were a component of the home economics program. Currently programs tend to be affiliated with departments of home economics, fine arts, or architecture. Drexel University has the only FIDER-accredited program in Pennsylvania; it is a four-year, baccalaureate degree program. Several other colleges, universities, and art schools offer some interior design courses and/or programs.

For qualification purposes for Professional Membership, Associate Membership, or Student Membership in ASID, a course in interior design at any university, college, or two- or three-year school of interior design will be considered only if the program is accredited by FIDER or is offered in a school accredited by a recognized accrediting body. No form of correspondence instruction will be considered in determining an applicant's qualifications.

Professional membership may be accorded to an individual who is regularly engaged in the professional practice of interior design and

I. Meets ONE of the following education/experience requirements:

- A. Completes a four- or five-year degree course at the college level with a major in interior design, and has the equivalent of two or more years of full-time practical work experience in the field, or
- B. Completes either a master's degree or a three-year professional program in interior design and has the equivalent of at least two years of full-time practical work experience in the field, and has one additional admission point, or

- C. Holds architectural registration and has the equivalent of at least two years of full-time practical work experience in the field.
- II. Passes the National Council for Interior Design Qualification (NCIDQ) examination. The examination consists of two parts given on two consecutive days. One part is academic (written) and the second portion involves design.
- III. Pays a filing fee to apply for membership, and an initial admission fee when joining.

Once an individual becomes a Professional Member, he/she retains this membership by payment of annual dues. Only Professional Members are permitted to use/the ASID appellation.

Associate Membership is an interim classification reserved for those design graduates who have completed their academic training and are engaged in fulfilling the mandatory work experience required for Professional Membership. Associate members must sit for the NCIDQ examination within three years after completion of the mandatory work experience.

Student Membership is granted to students who are enrolled at a college, university, or school of design and are pursuing a major course of study in interior design. This membership continues for a period of ninety days following completion of such a course of study.

Other forms of membership include Education Membership, Affiliate Membership, Press Membership, and International Corresponding Professional Membership.

While an individual can practice interior design without being a member of ASID, those practicing in the field report that there is increasing pressure to obtain this professional designation. ASID membership is viewed by those in the profession and those hiring interior designers as the universal indicator of professional competency.

CLIMATE FOR CONTINUING EDUCATION

Interior designers themselves express a need for continuing education in a number of areas. ASID has instituted a Professional Development Program which offers CEUs. Local chapters may offer these professional development courses to their members. Subject areas which might be of interest to interior designers include courses in business management for interior designers, oral communication, and art, as well as interior design subject matter.

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LANDSCAPE ARCHITECTURE

The State Board of Landscape Architects licenses landscape architects to practice in Pennsylvania. The Pennsylvania Landscape Architects' Registration Law is a practice act providing for mandatory licensing for practice of landscape architecture and use of the term "landscape architect."

LICENSING INFORMATION

To be licensed, an individual must:

- I. Be of good moral character, and not have had application, license, or certificate to practice landscape architecture refused, suspended, or revoked elsewhere in the United States.
- II. Meet ONE of the following options:
 - A. Option 1
 1. Be a graduate from a Board-approved school of landscape architecture.
 2. Have two or more years of satisfactory practical experience in landscape architecture prior to sitting for the examination. An approved additional year of study may be substituted for one year of experience.
 - B. Option 2
 1. Have eight or more years of satisfactory practical experience in landscape architecture.
- III. Pay an application fee.
- IV. Pass a five-part, written and graphic national examination.

The board may register and license without an examination any applicant who:

- I. Holds an unexpired license or registration issued in another state where the requirements and qualifications are at least equal to Pennsylvania's standards, or
- II. Has had at least fifteen years of experience in landscape architecture in charge of landscape architectural work or teaching, or ten years of experience following graduation from an approved institution.

RELICENSING INFORMATION

To maintain licensing, an individual must renew the license by paying a fee. The Board will determine the frequency of renewal.

Continuing education requirements: none.

BACKGROUND INFORMATION

In Pennsylvania students graduating in landscape architecture must work in the discipline for at least two years prior to taking the licensing examination. The facts that less than half of those taking the examination pass it the first time and some candidates take it several times before passing indicate that some preparation for the examination may be helpful. However, because landscape architecture is a relatively small discipline, it is difficult to assemble a group of licensure applicants for a preparatory course.

The examination, which has five parts, is a national one. However, each state has the option of including one section of its own design. Frequently this section concerns plant materials, since this information is most likely to vary from state to state.

Penn State graduates approximately fifty students yearly in its four-year accredited bachelor of science program in landscape architecture. The University of Pennsylvania, with a graduate program, and Temple University, with a two-year program, are the only other schools in the state offering landscape architecture programs.

The American Society of Landscape Architects, located in Washington, D.C., has over 7,000 members. The Pennsylvania-Delaware chapter has 200 to 225 members in four sections: Delaware, Philadelphia, Central, and Pittsburgh. Of these, the Pittsburgh section is described as being the most cohesive, regularly meeting group. The annual Pennsylvania-Delaware society meetings attract sixty to eighty members. There are a total of 500 to 600 licensed practitioners in Pennsylvania.

Nationally, the attitude toward licensing of landscape architects varies. Pennsylvania recently adopted a practice rather than a title act. Two other states, California and New York, have practice acts while thirty-six states have title acts. In Colorado, sunset legislation has eliminated all licensing, so that anyone may use the landscape architect title and practice the profession.

CLIMATE FOR CONTINUING EDUCATION

As noted earlier, the small number of persons annually preparing for the licensing examination in landscape architecture minimizes the feasibility of conducting preparatory classes or workshops. However, examination results appear to indicate a need for some type of review and preparation. A home study package, including slides and cassette tapes, has been suggested as a possible solution, but none has been developed as yet. A teacher's manual and a student's fact book were recently developed for use in a classroom setting, but their effectiveness has yet to be proven, or even tried on any significant scale.

Other than examination preparation, the need for continuing education for landscape architects is not perceived as being great. The bulk of a landscape architect's work is traditional site planning, an area that has experienced

few changes in the past several decades. Landscape architects generally feel that they maintain their skills by using them. If they undertake a job that includes some work with which they do not feel comfortable, they usually prefer hiring a consultant to acquiring the knowledge necessary to do the job themselves.

The areas of landscape architecture cited as having developed in recent years are large scale land planning, visual resource management, and historic preservation. Larger landscape architecture firms often hire younger, more recently educated persons to handle these aspects of their work. There might be potential areas for continuing education; in fact, the Philadelphia section did have one such program. Developed by the University of Pennsylvania, it was a ten-week, once-a-week course that attracted about twenty participants.

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LAW

In Pennsylvania, the Pennsylvania Board of Law Examiners is appointed by the Supreme Court of Pennsylvania to enforce the rules and orders relating to registration and admission to the bar. An individual must be admitted to the bar of the Supreme Court of Pennsylvania to regularly practice law within the Commonwealth.

INFORMATION RELATING TO ADMISSION TO THE BAR

To be admitted to the bar of Pennsylvania, an individual must:

- I. Receive an undergraduate degree from an accredited college or university, or complete an education that is equivalent to an undergraduate education in the opinion of the Board.
- II. Receive an earned Bachelor of Laws or Juris Doctor degree from an accredited law school. The Board may extend these provisions to accept completion of the study of law in a law school outside the geographical area encompassed by the accreditation activities of the American Bar Association.
- III. Have no record of prior conduct which, in the opinion of the Board, indicates character and general non-scholastic qualifications incompatible with the standards expected to be observed by members of the bar of Pennsylvania.
- IV. Satisfactorily complete the bar examination administered under the authority of the Board. There is a fee charged to take the examination, which is given each February and July.

An individual admitted to the bar of another state may be admitted to the Pennsylvania bar if this admission is in a reciprocal state; the applicant presents a certificate from the highest court of that state indicating good standing at the bar there; the applicant has either practiced law in another state or the District of Columbia for at least five years, been engaged in teaching of law at one or more accredited schools for at least five years, or engaged in a combination of these two activities for at least five years; and the applicant meets items I, II, and III above.

REGISTRATION INFORMATION

An individual must file a registration statement and pay an annual fee to retain active status to practice law in the Commonwealth of Pennsylvania.

Continuing education requirements: none.

BACKGROUND INFORMATION

The Pennsylvania bar examination has two portions. The multistate examination, which is used by a large number of states, is compiled and graded by ETS, with each state determining its own passing score. It is a day-long,

multiple choice examination that is considered to be quite difficult. The second, state portion of the examination is prepared by the Board. It is a day-long essay test.

Once an individual is admitted to the bar in Pennsylvania, he/she may practice before any court in the Commonwealth. A lawyer admitted to the bar in one state may handle a case in another state on a non-regular basis. In such cases, an attorney of record generally is present and introduces the visiting attorney to the court.

There is some specialization in the legal profession, but traditionally formal recognition of specialty practice has existed only in limited areas. However, some states have adopted procedures for certification of a number of specialties, and legal specialization is viewed as a growing trend. Specialty certification, where it exists, is not usually a condition for the practice of that specialty, but rather serves as a professional designation. Pennsylvania has no specialty certification at this time.

The Pennsylvania Bar Association is the state professional society for lawyers. There are also local associations in each county of the Commonwealth. These associations are private entities, but sometimes function in a quasi-public manner. They are often consulted in practical decisions, and their operation is intertwined with the state judiciary system. A substantial majority of lawyers belong to the county associations, and most belong to the state association also. Membership in a county association may reduce the cost of membership in the state association. Some county groups collect state dues with local dues, and thus their members automatically become members of the state organization.

The state and county associations are unrelated to the national American Bar Association (ABA). This lack of a direct relationship between the state and national organizations is due in part to the state and local orientation of law practice. This orientation is changing somewhat, however, as some national law firms are being formed. The Pennsylvania Bar Association does send delegates to ABA.

ABA accredits law schools throughout the country. Regional accrediting groups exist in some parts of the country, and their accreditation may be acceptable for admission to the bar in the states that they serve. The American Association of Law Schools certifies programs, concerning itself with academic content.

In addition to lawyers, the area of law also includes paralegals and legal administrators. Paralegals represent a fairly new occupational area, and as such are unregulated. A paralegal may do most of the things that a lawyer does, including meeting with clients, conducting background research, and putting documents together. Paralegals do not practice in court, however, and they assume less responsibility for legal work than do lawyers. In some cases an individual functioning primarily as a legal secretary may be referred to as a paralegal. There is a broad spectrum of training available for individuals wishing to become paralegals, ranging from four-year programs to programs having only a few courses. Paralegals are most frequently hired in larger law firms.

Legal administrators may be lawyers who have moved into management, or they may be non-lawyers who are hired to handle administrative details. There is no regulation of legal administrators. Private legal administrators are often employed by law firms, while public legal administrators are found in courts.

CLIMATE FOR CONTINUING EDUCATION

Mandatory continuing education for lawyers already exists in several states, and it is likely to become a requirement for registration in Pennsylvania in the future. Increased complexity of the law and a growing tendency toward legal specialization have heightened the need for continuing legal education. Both state and local bar associations provide continuing education for lawyers in Pennsylvania. While Penn State does offer some courses and programs that are of interest to lawyers, without a law school the University cannot easily provide continuing legal education.

Continuing education for paralegals is also needed, and Penn State has a program for them. This program is viewed as a help to legal secretaries who might wish to assume some additional responsibilities in a law office.

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LIBRARY SCIENCE

In Pennsylvania, public librarians are certified under the auspices of the State Librarian to implement his/her responsibility to counsel local libraries on minimum standards and to facilitate recognition of qualified persons by the local library boards of the Commonwealth. There are no certification or licensing requirements for academic or special librarians.

CERTIFICATION INFORMATION

An individual may apply for certification for the following public library positions: professional librarian, provisional librarian, or library assistant. Only the head librarian in each public library is required to be certified. To be certified, an individual must:

- I. Make application in accordance with the State Library standards.
- II. Meet the requirements of the designation desired, as described below.
 - A. To receive a certificate of professional librarian, an applicant must meet ONE of the following requirements:
 1. Have a baccalaureate degree from an approved or accredited four-year college or university and a fifth-year degree in library science from a school approved by the appropriate Commonwealth agency or accredited by the American Library Association, or
 2. As of June 14, 1961, have been employed as head librarian in a Commonwealth public library serving an area of more than 20,000 persons, or in a position classified as requiring a professional librarian.
 - B. To receive a certificate of provisional librarian, an applicant must meet ONE of the following requirements:
 1. Have a baccalaureate degree from an approved or accredited four-year college or university and have completed twelve credit hours of library service courses at institutions approved by the appropriate Commonwealth agency or accredited by the American Library Association, or
 2. As of June 14, 1961, have been employed as head librarian in a Commonwealth public library serving an area of 10,000 to 19,999 persons, or in a position classified as requiring a provisional librarian.
 - C. To receive a certificate of library assistant, an applicant must meet ONE of the following requirements:
 1. Have completed two academic years of college education in an approved or accredited institution and have completed

nine credit hours of library service courses at institutions approved by the appropriate Commonwealth agency or accredited by the American Library Association, or

2. Have completed two academic years of college education in an approved or accredited institution and have certificates of completion from five State Library sponsored in-service training courses, or
3. As of June 14, 1961, have been employed as head librarian in a Commonwealth public library serving an area of 9,999 persons or less, or in a position classified as requiring a library assistant.

There are no certification fees.

There is no certification by reciprocity of librarians in Pennsylvania. This type of arrangement was investigated and tried, but found to be unsatisfactory due to lack of cooperation from other states.

RECERTIFICATION INFORMATION

There is no recertification of public librarians in Pennsylvania at this time.

Continuing education requirements: none.

BACKGROUND INFORMATION

As noted above, public and school librarians are the only library science professionals required to be certified to practice in Pennsylvania, and there is no recertification. However, there has been a move in other states to recertify public librarians, and this question is being considered in Pennsylvania.

A Master of Library Science (MLS) degree is routinely required of librarians in academic positions, and often this requirement stipulates that the degree be granted by a school accredited by the American Library Association (ALA). Three schools in Pennsylvania (Clarion University of Pennsylvania, Drexel University, and University of Pittsburgh) and approximately seventy in the country have ALA-accredited programs.

Although the MLS is commonly required for librarians in academic institutions, at those institutions where librarians hold faculty status the requirements for promotion and tenure often result in academic librarians pursuing advanced degrees at both master's and doctoral levels, and often in disciplines other than library science. In addition, engaging in appropriate nondegree credit and noncredit programs is considered highly desirable in gaining promotion and tenure. User instruction programs concentrating on teaching methodology and user instruction program development are areas where academic librarians (and public librarians, too) find an insufficient number of relevant programs available as continuing education activities.

Special librarians working in business and industry are not subject to either certification or any uniformly applied educational standards. However, employers in these areas often require the MLS from an ALA-accredited school.

The Medical Library Association has a professional certification program for medical librarians. This is a form of recognition, but carries no legal implications.

In addition to the schools offering ALA-accredited programs, there are a number of schools with programs in school librarianship on the baccalaureate level. However, individuals seeking a Master of Library Science degree usually have a bachelor's degree in a subject area rather than in the library field.

In recent years the field of library science has experienced a fairly tight job market. This restricted market, combined with increasing numbers of library school graduates, has led some people in the profession to suggest that library schools be more selective in their admissions policies, and consider curriculum revision to serve the changing requirements of the profession more effectively.

CLIMATE FOR CONTINUING EDUCATION

Although librarians are not obligated to participate in continuing education, many library personnel are interested in it and are encouraged to become involved in various activities. As an outgrowth of this interest the State Library, in cooperation with the Pennsylvania Library Association, developed a plan for coordination of continuing education for librarians. The project established four regional councils responsible for determining continuing education priorities and negotiating with appropriate providers for program delivery.

While institutions of higher education, the professional library organizations, and the State Library provide the continuing education offerings necessary to meet most librarians' needs, there is increasing demand for coordinating continuing education programs. In its Comprehensive Plan for Library Service in Pennsylvania, the State Library recommended that it "... participate in the design, coordination, and provision of library related continuing education opportunities within the state." The content of these activities would focus on marketing, interlibrary cooperation, technology, and governance responsibilities. Technological changes, principally in computer use, and increasingly complex management problems require fresh consideration of the ways in which libraries organize and provide services, while new studies of the process of information transfer suggest related fields for continuing education.

It was suggested that Penn State could augment the programs already offered, which are primarily in library science, with some continuing education programs addressing information theory, use of computer technology, management and communication skills, planning, teaching/skills for librarians, user instruction program planning, and the learning process. In southcentral Pennsylvania a regional council works cooperatively with all types of libraries both to identify needs and implement continuing education activities on a variety of topics, including management and the use of microcomputers.

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MARKETING

There is no mandatory licensure or certification for persons in marketing in Pennsylvania. However, two fields within marketing offer voluntary certification programs. The Public Relations Society of America, Inc. (PRSA) sponsors such a program for public relations personnel. The Business-Professional Advertising Association (B/PAA) provides a certification program for persons engaged in business-to-business advertising.

CERTIFICATION INFORMATION

PRSA uses the term "accreditation" synonymously with certification. In order to be accredited, an individual must:

- I. Have five years of experience in the public relations field.
- II. Successfully complete an accreditation examination.
- III. Pay a membership and an accreditation fee.

In order to become a Certified Business Communicator (CBC) through B/PAA, an individual must:

- I. Have a combined total of eight years of experience in business/professional marketing communications. A maximum of four years of college education may be substituted for up to four years of work experience.
- II. Successfully complete a certification examination.
- III. Pay a certification fee.

RECERTIFICATION INFORMATION

PRSA has no provisions for recertification currently.

Continuing education requirements: none.

B/PAA provides for recertification every five years. In order to be recertified, an individual must:

- I. Maintain continuous membership in B/PAA for five years, or
- II. Demonstrate continued self-education and professional development, or
- III. Successfully complete a re-examination.

BACKGROUND INFORMATION

Marketing is a very broad and complex field with the basic goal of enhancing the consumer's perception and utilization of products or services. A consumer may be an individual or group of persons, such as an agency, business, or other organization. Marketing comprises many specialty areas, and persons within specialties may work in a variety of settings, but all aspects of marketing relate to the same basic goal.

The major components of marketing include marketing research, marketing management, advertising, sales, sales management, public relations, retailing, product management, and marketing planning. While many positions are in business and industry, associations, hospitals, and universities also employ persons in marketing. Within each specialty area, jobs are varied; for example, public relations encompasses writing, speaking, research and evaluation, production, and event management. There are many interrelationships among marketing personnel and agencies. For instance, the marketing research division of a company may hire a marketing research consulting firm to conduct a survey, and the advertising department of the same company may contract another agency to develop its advertising campaign.

Because of the diversity within marketing, employment qualifications vary widely. Although a college degree is required for many entry level jobs, this is not a universal prerequisite. Prospective advertising professionals might submit a portfolio to potential employers in lieu of, or in addition to, a college diploma, and many sales personnel at the retail level begin their careers without college preparation. However, sales representatives in many fields must have an undergraduate degree; computer salespersons, for example, must have a solid knowledge of computer operations. Perhaps marketing research demands the highest level of academic preparation, for persons in this field generally have at least a master's degree. Employers frequently desire sales experience in addition to academic qualifications. Even individuals with M.B.A. degrees may spend a year or so gaining sales experience before entering marketing positions.

Many colleges and universities offer specialized coursework in advertising, public relations, or marketing. Advertising is often affiliated with journalism programs, while marketing and sales management and research courses tend to be associated with colleges of business. Penn State offers an advertising major within the School of Journalism, and a wide range of marketing and sales courses through the Marketing Department within the College of Business Administration. Experienced marketing professionals stress the importance of practical applied knowledge, for without it academic degrees are meaningless.

The only areas which offer certification programs are public relations and business-to-business communications. To date, there are fewer than 3,000 persons accredited by PRSA, and only about 800 CBCs, so the acceptance of certification is limited. In fact, because marketing is a competitive field in which individuals or agencies are judged by results rather than academic credentials, many professionals within the field see little value in certification. A possible exception to this might be the field of marketing research, which is considered a more rigorous and scientific discipline than other marketing specialties.

A number of professional organizations serve personnel in the marketing professions. PRSA, the largest association for public relations personnel, is dedicated to increasing professionalism within the field. It has local and college chapters; Philadelphia and Pittsburgh each have affiliated organizations. Two large marketing organizations include Sales and Marketing Executives International (SMEI) and the American Marketing Association. Each have several local chapters in Pennsylvania, primarily in the eastern part of the state. The Advertising Federation of America represents advertising professionals, and has over 200 advertising clubs located in major cities, as well as college chapters. Other organizations include B/PAA, American Association of Advertising Agencies, Association of National Advertisers, the Direct Mail/Marketing Association, The Advertising Council, Inc., and the Association of Industrial Advertisers. The American Management Association (AMA) covers a variety of management personnel, including those in marketing and sales fields.

CLIMATE FOR CONTINUING EDUCATION

Many continuing education opportunities exist for marketing professionals, with the major providers being professional associations, commercial enterprises, businesses, and institutions. AMA offers the widest range of workshops, holding about forty seminars in the area of advertising/sales promotion, public relations management, product and brand management, marketing management, customer service, marketing research and forecasting, and selling and sales management. SMEI offers three seminars on sales and sales management, and the American Marketing Association has conferences geared to marketing research personnel. Within the advertising field, few national associations offer many programs, although some continuing education may be conducted through local chapters. The Direct Mail/Marketing Association is more highly involved in continuing education. PRSA also offers over twenty seminars that cover many aspects of public relations.

The Wharton School of Business, Drexel University, and the University of Pittsburgh are among the institutional providers of continuing education. Penn State also offers workshops and sponsors executive education programs. Westinghouse Corporation is one example of an in-house continuing education sponsor: its catalogue of course offerings approaches Penn State's in size.

Employers are generally supportive of continuing education for their staff members if they feel a program is conducted well, has practical applications, and stimulates creativity. Exposure to new ideas and other professionals is critical for persons working in the creative side of marketing, since running dry of ideas can be a great fear. Workshops which introduce the participants to even one good idea are considered to be worthwhile. There is a need for more interaction among non-competing professionals, according to some resource persons.

Because the marketing field is so broad, continuing education programming must be directed towards areas of specialization, or appeal to a functional area which relates to a number of specialties. Some special needs might include sales training, management strategies, internal communications, and interpersonal skills. A case study approach may work well in some continuing education settings. Although continuing education opportunities abound, marketing programs aimed at non-business people or small business operators might be successful.

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MEDICAL RECORDS
ADMINISTRATORS AND TECHNICIANS

There is no mandatory licensure or certification for medical record administrators or technicians in Pennsylvania. However, voluntary registration is provided through the American Medical Record Association (AMRA).

REGISTRATION INFORMATION

In order to become a Registered Record Administrator (RRA), an individual must:

- I. Complete:
 - A. An accredited baccalaureate degree program in medical record administration, or
 - B. An accredited one-year postgraduate certification program in medical record administration, and hold a college degree.
- II. Successfully complete the AMRA national registration examination for RRAs.
- III. Pay a registration fee.

In order to become an Accredited Record Technician (ART), an individual must:

- I. Complete:
 - A. An accredited academic program for medical record technicians, or
 - B. AMRA's Independent Study Program in Medical Record Technology, and have thirty semester hours of AMRA-approved college credit.
- II. Successfully complete the AMRA national registration examination for ARTs.
- III. Pay an accreditation fee.

RE-REGISTRATION INFORMATION

In order to remain currently registered as an RRA, an individual must:

- I. Complete thirty hours of continuing education every two years.
- II. Pay a re-registration fee.

In order to remain currently registered as an ART, an individual must:

- I. Complete twenty hours of continuing education every two years.
- II. Pay a re-registration fee.

BACKGROUND INFORMATION

Medical record administrators and technicians work in the field of medical information systems. Their responsibilities are more supervisory and administrative than those of medical record personnel in clerical positions such as transcriptionists, file clerks, chart analyzers and re-analyzers, and coders. All hospitals and an increasing number of other health care facilities such as college health centers have medical record departments to maintain a record of each patient's diagnoses and treatments. Information contained in the medical record may be used for purposes beyond patient care, such as preparing reports or special studies or responding to authorized inquiries by insurance or legal personnel.

Any medical institution accredited by the Joint Commission on the Accreditation of Hospitals (JCAH) must employ an ART or RRA on a full time or consultant basis to oversee the administration of the medical record department. Health care facilities that are not accredited by JCAH do not have this requirement, but some employ RRAs or ARTs nevertheless.

A medical record administrator at the RRA level generally supervises other department staff members and is responsible for designing and implementing health information and medical record management systems. An ART also may function as the medical record department administrator, or may be employed as a technician under an RRA's supervision. Because an ART's level of training is lower than that of an RRA, the ART even at the administrative level may assume fewer management and budgetary responsibilities than an RRA, depending on the institution's overall administrative organization. An ART working as a technician for an administrator may act as the tumor registry clerk or may administer designated areas within the medical record department. The responsibilities RRAs and ARTs assume vary widely among different kinds and sizes of health care facilities.

Modern technology has made it possible to retain and retrieve medical records efficiently through the use of computers, microfilm, and microfiche. Word processing equipment aids in record transcription. However, many smaller facilities are just beginning to develop computer and word processing capabilities. The administrator is also responsible for analyzing data generated by the management system. Because of the nature of the job, the medical record administrator is in daily contact with the medical staff and administration. Increasingly an administrator is involved with non-hospital personnel and may have to respond to court subpoenas, for instance. Another crucial aspect of an administrator's work is maintaining the confidentiality of records.

ARTs and RRAs have similar initial academic preparation, including coursework in anatomy, physiology, medical terminology, and medical record science, and supervised practical experience. However, while ART-level (technician) programs are two years long and lead to an associate degree, RRA-level (administrator) programs provide additional specialized coursework and lead to a baccalaureate degree. There are also one-year postgraduate certificate programs in medical record administration. AMRA offers an independent study course in medical record technology which, combined with thirty hours of approved college credits, qualifies an individual to sit for the ART examination. AMRA and the Committee on Allied Health Education and Accreditation of the American Medical Association accredit each type of

program. In Pennsylvania, York College and Temple University offer accredited four-year programs in medical record administration and Gwynedd-Mercy College, Community College of Philadelphia, and Community College of Allegheny County have accredited programs in medical record technology.

AMRA is the national professional association serving medical record administrators and technicians. Founded in 1928, it now has over 23,000 members and is interested primarily in ensuring the professionalism of the field and promoting quality education for prospective administrators or technicians. RRAs and ARTs are eligible for active membership, other interested persons may become associate members, and student membership is available to full time students in approved medical record programs. The state affiliate is the Pennsylvania Medical Record Association (PMRA).

Although certification is voluntary, unless the medical record department administrator is working in a health care facility not accredited by JCAH or is supervised by a consulting RRA or ART, that individual must be registered in order to meet JCAH accreditation standards. There are currently 1,175 RRAs and ARTs in Pennsylvania.

CLIMATE FOR CONTINUING EDUCATION

AMRA believes strongly in the value of continuing education, as evidenced by their re-registration requirements for RRAs and ARTs. The association approves continuing education programs sponsored by other organizations and assigns hours of credit per program. Approved continuing education activities include educational portions of association meetings, a variety of specified individual study formats, and relevant coursework, as well as seminars and workshops.

AMRA maintains an extensive lending library and provides a limited amount of continuing education through workshops and conferences. Programs this year focus on managing for prospective pricing and ICD-9-CM coding and data management, as well as on DRGs. The Hospital Association of Pennsylvania in conjunction with JCAH has sponsored seminars on this topic also. PMRA and regional or local chapters provide substantial programming, as do hospitals through their own in-service meetings. Educational institutions are other sources of continuing education. For example, Penn State has offered a workshop focusing on the legal aspects of medical records.

Medical record professionals face several challenges in the 1980s which continuing education might help them meet. The international system for coding diseases changes approximately every ten years, and AMRA or PMRA often update personnel on these changes. Administrators must handle increased requests for information from non-hospital personnel while still maintaining necessary record confidentiality. The information and technology explosion poses another challenge to modernize and streamline management systems. Many smaller health care facilities are beginning to make plans to computerize their record department and personnel must be trained to understand and work with new computer systems. Some administrators feel that refresher courses in the basic sciences would be useful. Medical record administrators and technicians must remain aware of innovative approaches to managing medical information, and continuing education can address this need.

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MEDICAL TECHNOLOGY

There is no licensing of medical technologists in Pennsylvania. However, certification that exists on a voluntary basis through four national registries is regarded as a criterion for employment.

CERTIFICATION INFORMATION

There are four national registries for medical technologists. The four agencies and their requirements for certification and registration are:

I. American Society of Clinical Pathologists (ASCP)

To be certified, an individual must meet the following requirements:

- A. Have a baccalaureate degree from an accredited college or university including specific credit hours in the sciences and mathematics.
- B. Meet ONE of the following options:
 - 1. Complete a twelve month accredited medical technology program, or
 - 2. Be certified as a medical laboratory technician, and have three years of laboratory experience, or
 - 3. Be certified as a laboratory assistant, and have four years of laboratory experience, or
 - 4. Have five years of laboratory experience as specified by ASCP.
- C. Pass the ASCP certification examination.
- D. Pay a fee.

II. American Medical Technologists (AMT)

To be certified, an individual must meet the following requirements:

- A. Meet ONE of the following options:
 - 1. Hold a baccalaureate degree in medical technology with a major in one of the biological sciences from an accredited college or university, and have one year of approved laboratory experience, or

2. Complete ninety semester hours in an accredited college including specific credit hours in the sciences and mathematics, and have one year of approved laboratory experience, or
3. Be registered as a medical technician, and have three years of approved laboratory experience, or
4. Pass the Health and Human Services (HHS) Proficiency Examination.

B. Pass the AMT certification examination.

C. Pay a fee.

III. National Certification Agency for Medical Laboratory Personnel (NCA)

To be certified as a Clinical Laboratory Scientist (CLS), an individual must meet the following requirements:

A. Meet ONE of the following options:

1. Hold a baccalaureate degree from a clinical laboratory science program at an accredited college or university, or
2. Hold a baccalaureate degree which includes thirty-six semester hours in the biological and physical sciences, and complete a clinical laboratory program recognized by a government agency, or
3. Hold a baccalaureate degree which includes thirty-six semester hours in the biological and physical sciences, and have two years of approved laboratory experience, or
4. Complete sixty hours of college work including thirty-six semester hours in the biological and physical sciences, and have ten years of approved laboratory experience.

B. Pass the NCA certification examination.

C. Pay a fee.

IV. International Society for Clinical Laboratory Technology (ISCLT).

To be certified, an individual must meet the following requirements:

A. Meet ONE of the following options:

1. Hold a baccalaureate degree from an accredited college or university with a major in a biological or physical science, and have one year of approved laboratory experience, or
2. Be a registered laboratory technician with five years of approved experience and meet continuing education requirements, or

3. Pass the HHS Proficiency Exam.

B. Pass the ISCLT certification examination. Those individuals who pass the HHS Proficiency Examination are not required to sit for the ISCLT examination.

C. Pay a fee.

RECERTIFICATION INFORMATION

In order to maintain certification by ASCP, AMT, or ISCLT, an individual must pay an annual fee. There are no continuing education requirements.

NCA registration is valid for four years. In order to be recertified, an individual must meet the following requirements:

I. Meet ONE of the following options:

A. Successfully complete a recertification examination. This option provides recertification for five years, or

B. Complete four CEUs every two years.

II. Pay a fee.

BACKGROUND INFORMATION

Licensing of medical technologists exists in some states, and there has been talk of licensing in Pennsylvania, but no action has evolved. Proponents of licensing suggest that there is a need for legal definition of medical technologists, and that a law supported by medical technologists would place the responsibility for the practitioner's competence on the licensing board and the practitioner rather than on the laboratory supervisor or director. While the profession presently lacks a common certification mechanism and unity, major changes appear imminent. The American Society for Medical Technologists (ASMT) and AMT held their first annual joint meeting in 1984. At the 1985 meeting a vote will be taken on merging the two societies. Because AMT is a certifying body and ASMT is not, a difficult decision will have to be made regarding the role of a united society in the certification process.

Where licensing does not exist, an individual may fill a medical technologist position without meeting any mandatory requirements other than those set by his or her employer. Many hospitals and clinical laboratories do require certification for employment. In hospitals participating in the Medicare Program, evidence that employees meet certain standards of competency must be given for the hospital to be reimbursed for Medicare services. Standards of achievement and function in medical technology have not been nationally formalized or coordinated by any government agency. An individual chooses the registry by which he wants to be certified, and maintains his registration there.

Those medical technologists who were neither certified nor had formal education in medical technology but had years of experience and training in a medical laboratory could take the HHS Proficiency Examination. This examination was developed to be used as a measure of competency of those

individuals working as medical technologists without formal education in the field. However, this examination has not been offered on a regular basis for several years. The most recent examination was in 1983 and it appears unlikely that HHS will offer it again.

Each registry has several functions, including the design and administration of its own certification examination and the maintenance of a registry of those individuals certified by the agency. Each registry provides a list of medical technologists who have met certain standards of career entry-level competency generally recognized by practitioners in the field.

Categorical certification exists in the field of medical technology. These categories include cytotechnology, technologist in chemistry, hematology, microbiology, and nuclear medicine. Category certification is provided by the American Society of Clinical Pathologists and independent certifying agencies in each category. Specialist certification exists for post-baccalaureate study.

CLIMATE FOR CONTINUING EDUCATION

Continuing education is "pushed to the hilt" by the state and national societies. The Pennsylvania Society for Medical Technology, the state chapter of the Society for Medical Technology, sponsors workshops in the spring and winter, and the local chapters offer ongoing programs. The national conventions have workshops a full week ahead of their annual program.

Continuing education remains a very important aspect of medical technology simply because of the field's technical nature and the rapid technological advances occurring almost daily. Implementation of the Tax Equity and Fiscal Responsibility Act (TEFRA) and Diagnostic Related Groups (DRGs) will likely lead to a shift in the subject matter of interest to medical technologists as compared with laboratory technicians. Medical technologists will be more involved in supervisory decisions regarding evaluation and selection of test protocols, cost-effectiveness, and personnel productivity than at anytime in the past. Continuing education programs dealing with these kinds of topics are expected to attract the interest of medical technologists in the near future.

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**MEDICINE
DOCTOR OF OSTEOPATHIC MEDICINE**

The State Board of Osteopathic Medical Examiners licenses physicians to practice osteopathic medicine and surgery. It is unlawful for any person to practice osteopathic medicine or assume the title of Doctor of Osteopathic Medicine and Surgery (D.O.) in Pennsylvania unless he/she is licensed by this Board.

LICENSING INFORMATION

In addition to an unrestricted license for the practice of osteopathic medicine and surgery, the Board may grant a temporary license for a graduate of an osteopathic medical college for twelve months. This license confers the right to participate in approved graduate osteopathic or medical training within the complex of the hospital to which he is assigned.

To obtain a license without restriction, an individual must:

- I. File a completed application attesting to the fact that he/she is of good moral character and not addicted to habit-forming drugs.
- II. Be a graduate of an osteopathic medical college that is accredited by the American Osteopathic Association (AOA).
- III. Complete an AOA or AMA approved one-year internship or first year residency.
- IV. Pay a fee.
- V. Pass both a written and practical osteopathic manipulative therapy examination.

Licensure by endorsement may be given by the Board if an individual meets all requirements as stated above, submits certification of current licensure in another state with equal licensure requirements, and appears for a personal interview.

REREGISTRATION INFORMATION

After licensure, an individual who plans to practice in Pennsylvania must pay a registration fee and obtain and show proof of compliance with Health Care Services Malpractice Act No. 111. An individual shall register his or her license biennially by paying a fee, showing continued proof of compliance with Act III, reporting any multiple state licensure, and reporting any disciplinary action taken against any other state licensure.

In order to practice osteopathic medicine and surgery in Pennsylvania, a physician must carry malpractice insurance. Malpractice insurance companies are required to show evidence of risk management programs, under regulations of the State Insurance Department. An acceptable form of risk management for a D.O. is to participate in 150 credit hours of

continuing medical education (CME) per three year period. Because of this requirement, although continuing education is not a legal requirement for reregistration, it is a practical requirement for all D.O.s.

BACKGROUND INFORMATION

The requirements for the practice of osteopathic medicine and surgery are quite similar to those for allopathic medicine, with the exception that legislation regulating osteopaths includes provisions for osteopathic manipulative therapy. D.O.s and M.D.s otherwise perform the same or very similar functions. AOA is the national professional organization for D.O.s, and the Pennsylvania Osteopathic Medical Association is the state chapter. To qualify for membership in either of these organizations, a D.O. must meet the CME requirement described above. AOA maintains records of members' CME participation. AOA-approved hospitals strongly urge membership in state and local societies if physicians wish to participate and have staff privileges.

There are approximately 2,000 D.O.s practicing in the Commonwealth. Pennsylvania has only one osteopathic college, the Philadelphia College of Osteopathic Medicine. Seventeen hospitals in the state have AOA approval.

A D.O. may apply for training and certification in special departments of osteopathic medicine. D.O.s must be licensed by the State Board of Osteopathic Medical Examiners while they are participating in a specialty training program, which may be in either an osteopathic or an allopathic hospital. A D.O. needs a temporary license during the first year of specialty training, and also during the second year of training unless he or she possesses an unrestricted license. The D.O. must possess an unrestricted license before entering the third year. D.O.s are certified in their specialty area by AMA or AOA, but not by the state. Both AMA and AOA have specialty certifying boards that give examinations and require that other qualifications for specialization are met. Some of the specialty areas have CME requirements for continued certification in excess of those required for AOA membership.

CLIMATE FOR CONTINUING EDUCATION

Although CME is not a legal requirement for the practice of osteopathic medicine, in practice CME participation is almost essential. CME programs offered by AMA are often AOA-approved also. CME Category I-A, which includes formal educational programs, stipulates that at least half of the faculty of such programs must be osteopathic physicians or members of osteopathic college faculties or staffs, or staff members of AOA-approved teaching hospitals. However, this stipulation applies only to D.O.s who are members of the Pennsylvania Osteopathic Medical Association (POMA). Thus it is difficult for any but an osteopathic institution to offer Category I formal CME programs for D.O.s who belong to POMA. AMA-approved programs can be used by all D.O.s to meet requirements beyond the sixty Category I credit hours, however, and in addition nonmembers of POMA can obtain their Category I credits in AMA-approved programs.

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MEDICINE
MEDICAL DOCTORS

The State Board of Medical Education and Licensure, under the Medical Practice Act of 1974, licenses physicians to practice medicine and surgery in the Commonwealth of Pennsylvania. It is unlawful for any person to practice medicine or assume the title of Doctor of Medicine (M.D.) in Pennsylvania unless he/she is licensed by this Board.

LICENSING INFORMATION

To obtain a license without restriction, an individual must:

- I. Be of legal age, good moral character, and not addicted to the intemperate use of alcohol or the habitual use of narcotics or other habit-forming drugs.
- II. Be a graduate of an accredited medical college. If a graduate of a foreign medical school (except those in Canada), the licensure applicant must also present evidence of certification by the Educational Council for Foreign Medical Graduates, and complete one year of approved graduate medical education.
- III. Attach an affidavit or affirmation of the applicant as to the verity of the application.
- IV. Pay a fee.
- V. Pass an examination.

Licensing by reciprocity may be established at the discretion of the Board. However, no blanket reciprocal agreements or endorsements (except for Canada) are covered in the Medical Practice Act. The Board will consider endorsing physicians from other states with equivalent standards on a case-by-case basis.

In addition to an unrestricted license for the practice of medicine and surgery the Board may grant a temporary license for a graduate medical trainee in the first year of training which is valid for twelve consecutive months and confers the right to participate in approved graduate medical training; a limited license, granted to a graduate of a foreign medical school, for the purposes of teaching and/or practicing medicine and surgery in a medical college; or a graduate certificate for a physician training in a specialty.

RELICENSING INFORMATION

To remain licensed, an individual must register biennially, paying a fee.

In order to practice medicine in Pennsylvania, a physician must carry malpractice insurance. Malpractice insurance companies are required to show evidence of risk management programs, under regulation of the State Insurance Department. An acceptable form of risk management is for an

M.D. to participate in 150 credit hours of continuing medical education (CME) per three year period, with a minimum of sixty of these hours being obtained under Category I. Because of this requirement, although continuing education is not a legal requirement for relicensure, it is a practical requirement for all M.D.s.

BACKGROUND INFORMATION

The American Medical Association (AMA) is the national professional association for M.D.s. The Pennsylvania Medical Society (PMS), with approximately 16,000 members, is the state organization. To qualify for membership in PMS, or to obtain the AMA's Physician's Recognition Award (PRA), a physician must meet the CME requirements described above.

An M.D. may specialize in a particular field of medicine. Specialty certification is granted by independent specialty boards which establish requirements and give examinations for certification. Board certification is a professional designation that is unrelated to an M.D.'s license to practice. Specialty societies may specify the type and amount of CME required for membership, but at this time only the American Academy of Family Practice has requirements that differ to any degree from those for AMA's PRA.

CLIMATE FOR CONTINUING EDUCATION

Although CME is not a legal requirement for the practice of medicine in Pennsylvania, in practice CME is almost essential.

Some CME is offered by PMS, but most of the CME in Pennsylvania is provided by community hospitals, medical schools, and state specialty societies. The PMS is recognized by the AMA to accredit intrastate institutions to offer CME activities.

The CME requirements established by the AMA, and used for PMS membership and PRA qualification, include 150 credit hours every three years, distributed among the various categories as follows:

<u>Category</u>	<u>Credit Hour Limit</u>
I CME activities with accredited sponsorship (60 hours minimum)	no limit
II CME activities with non-accredited sponsorship	45
III Medical teaching	45
IV Papers, publications, books, exhibits	40
V Non-supervised CME individual CME	45

5(a): Self instruction (22 credit hours)

5(b): Consultation (22 credit hours)

Category

Credit Hour Limit

5(c): Patient care review (22 credit hours)

5(d): Self-assessment (22 credit hours)

VI Other meritorious learning experiences

45

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MUNICIPAL GOVERNMENT MANAGEMENT

There is no mandatory licensure or certification of municipal managers in Pennsylvania. However, a municipality must meet specified operational criteria if its manager is to join the International City Management Association (ICMA) and the Association of Pennsylvania Municipal Managers (APMM), the professional organizations for local government managers.

BACKGROUND INFORMATION

Anyone can be a local government manager in Pennsylvania, as in all other states. Georgia is the only state to attempt to introduce certification of municipal managers, and at this time their certification is a voluntary program. Regulation of municipal managers is not generally sought by practitioners or by their professional associations.

Because of this lack of regulation, the backgrounds, education, and experiences of municipal managers vary widely. In many Pennsylvania boroughs and townships managers are not professionally trained, but are simply people who have agreed to serve in a managerial capacity. However, other managers have substantial amounts of relevant education and experience. Both types of managers are concerned with professional organization and development.

Each municipality sets its own standards for the education and experience of the manager it will employ. Municipalities may seek managers with a baccalaureate degree in fields such as engineering, political science, business administration, or public administration, or with a master's in public administration. Experience is frequently considered desirable also, and may be obtained by working as an assistant manager, manager of a small local government unit, or as a financial, personnel, or other officer in a local government operation.

ICMA and APMM provide continuing education, a forum for discussion, and information dissemination for their members. The structure of the governmental body managed and the criteria of the manager's position, rather than the qualifications of the manager, make an individual eligible for membership. A manager wishing to join either ICMA or APMM must occupy either a council-manager position or a general management position, as determined by an evaluation conducted by APMM. This determination is based upon review of a number of factors including appointment to the position, budget responsibilities of the position, organizational relationship between the manager's position and other departments, and appointing authority of the manager. It also should be noted that municipal managers must be appointed, not elected.

Over 300 municipalities and Councils of Government (COGs) in Pennsylvania are currently recognized by APMM as meeting the standards discussed above, and this number is growing as more management positions are developed and recognized each year. APMM evaluates approximately ten municipalities for initial recognition yearly. APMM has a membership of 237 municipal managers, assistants, and COG directors, making it one of the leaders in the country in numbers of professional administrators.

APMM has an annual three day conference, held in the city chosen by the current president. This is basically a continuing education program. Fifty to seventy-five members normally attend these meetings. APMM also reaches the

managers of boroughs and townships at their association meetings and through a quarterly newsletter. Organizational, training, and legislative liaison work is performed for APMM under a contract with the Penn League of Cities.

Once APMM has recognized a municipality, ICMA will also accept its manager as a member. ICMA holds annual educational meetings and has developed a sophisticated professional development program based on the needs of individual members.

CLIMATE FOR CONTINUING EDUCATION

APMM and ICMA provide continuing education for their members at conferences. Penn State provided the annual conference program a few years ago when the conference was held in State College, and because of its acceptance by attendees APMM has continued that format. APMM exhibits a strong interest in continuing education for its members and works closely with the Department of Community Affairs in the development of programs held throughout the state.

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NURSING
CERTIFIED REGISTERED NURSE ANESTHETISTS

There is no mandatory certification or licensure of nurse anesthetists in Pennsylvania. However, according to the Rules and Regulations of the State Board of Nurse Examiners for Registered Nurses (R.N.s), an R.N. can only administer anesthesia provided he or she is a Certified Registered Nurse Anesthetist (C.R.N.A.). This certification is national and is provided by the American Association of Nurse Anesthetists (AANA).

CERTIFICATION INFORMATION

To be certified as a C.R.N.A., an individual must:

- I. Graduate from an approved school of nurse anesthesia.
- II. Pay an examination fee.
- III. Successfully complete the certification examination. This examination consists of 250 multiple choice questions. It may be retaken two times without repaying the fee or reapplying for the examination. If the candidate fails for the second time, he or she must take a refresher course, reapply for the certification examination, and pay the current fee.

Certification is valid for two years.

RECERTIFICATION INFORMATION

To be recertified as a C.R.N.A., an individual must:

- I. Be currently licensed as an R.N.
- II. Be currently employed in the field of anesthesiology as an administrator, practitioner, or educator.
- III. Have initial certification as a C.R.N.A.
- IV. Provide evidence of participation in forty hours of approved continuing education within the past two years.
- V. Pay a recertification fee.

Recertification is valid for two years.

BACKGROUND INFORMATION

Nurse anesthetists are responsible for the anesthetic management and care of the conscious and unconscious patient. This care is most frequently given in the operating room or obstetrical unit. Sometimes the nurse anesthetist is called upon to help cardiac and respiratory arrest patients in the hospital as well as those who arrive in the emergency room. While most nurse anesthetists are directly employed by hospitals, some nurse anesthetists contract their

services to hospitals on a freelance basis. Dentists as well as physician groups also may employ nurse anesthetists.

There are approximately twenty-three AANA-approved programs of nurse anesthesia in Pennsylvania. These programs can be certificate, baccalaureate, or master's degree programs. The length of a program is twenty-four months.

There are approximately 1800 C.R.N.A.s in Pennsylvania.

CLIMATE FOR CONTINUING EDUCATION

The Pennsylvania Association of Nurse Anesthetists (PANA), the state chapter of AANA, is divided into seven districts. Both the local and state chapters offer continuing education programs. However, there has been some indication that it is difficult for some C.R.N.A.s to attend the local programs, which are usually evening meetings, due to the distance that must be traveled. PANA holds an annual meeting which is primarily educational. The national conference of AANA also offers continuing education programs as well as periodic workshops in I.C.A.R.E. and biophysics.

The significant amount of continuing education appears to be offered as in-service programming at hospitals employing nurse anesthetists. C.R.N.A.s may also attend the continuing education programs offered by other professional associations such as the American Medical Association and the American Nurses' Association. Medical schools also offer some programs particularly designed for nurse anesthetists. However, all programs must be approved by AANA for an individual to receive continuing education credit for recertification.

Many C.R.N.A.s received their basic R.N. training from a diploma or associate degree program. However, there has been increased emphasis on the desirability of a baccalaureate degree for nurses in all areas of practice, and especially for those working as nurse anesthetists. Most anesthesia schools now require a baccalaureate degree for admission and some schools now grant a master's degree upon graduation.

Diploma school graduates must obtain thirty additional college credits, preferably in physics, chemistry or other related sciences, before admission to an anesthesia school. In addition, all candidates must have one year of prior experience in a specialty area such as a cardiac care unit, intensive care unit, operating room, or emergency room.

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C The Pennsylvania State University, November, 1979; July, 1984.

NURSING
CERTIFIED REGISTERED NURSE PRACTITIONERS

The State Board of Nurse Examiners and the State Board of Medical Education and Licensure provide for a licensed registered nurse practicing in Pennsylvania to be certified as a Certified Registered Nurse Practitioner, with permission to that title and the initials "C.R.N.P."

CERTIFICATION INFORMATION

Under the rules and regulations effective October, 1977, to be certified an individual must:

- I. Be currently licensed as a Registered Nurse in the Commonwealth.
- II. Successfully complete a course of study consisting of at least one academic year in a program administered by a department of nursing in an institution of higher education as approved by the Boards.
- III. Pay a certification fee.

A C.R.N.P. granted certification by another state board may be granted certification in Pennsylvania if the credentials are equivalent to those required in this state.

RECERTIFICATION INFORMATION

To be recertified, an individual must:

- I. Be currently licensed as a Registered Nurse in the Commonwealth.
- II. Pay a recertification fee.

Certified Registered Nurse Practitioners must maintain their certification through biennial recertification on or before October 30 of the odd numbered years.

Continuing education requirements: None.

BACKGROUND INFORMATION

Registered Nurse Practitioners were first recognized and established in 1965. Since that time, C.R.N.P.s have been trained in a variety of ways including training in doctor's offices, completing a special certificate course in a given nursing specialty, or completing a special master's program in nursing. This diversity of preparation for the profession has presented strong obstacles to determining guidelines for certification. Therefore, it is the current practice for the respective state licensing boards to evaluate and certify an applicant on an individual basis within the framework of the rules and regulations of the Boards. It is anticipated that certification of C.R.N.P.s will grow whether through state mechanisms, ANA, or other organizations.

Voluntary certification of nurse practitioners also is given by the American Nurses Association and some other national specialty organizations. The ANA's certification program was organized to recognize individual achievement in specialized nursing practice, not as a mandatory requirement for practice. There are certification programs for nurse practitioners in each of the following Divisions on Practice: Division on Community Health Nursing Practice, Division on Gerontological Nursing Practice, Division on Maternal and Child Health Nursing Practice, Division on Medical-Surgical Nursing Practice, and Division on Psychiatric and Mental Health Nursing Practice.

To be certified by the ANA, an individual must:

- I. Meet eligibility requirements, which include:
 - A. Having a current license to practice as a registered nurse in the United States.
 - B. Having specified experience as a registered nurse in the area in which certification is desired.
 - C. Having completed the educational requirements as stipulated for the particular area of practice.
- II. Complete an application form, including payment of an application fee. A certification fee is payable after the application has been accepted and prior to testing.
- III. Pass an examination, which is administered and scored by an independent testing agency.

The certification board for each Division on Practice makes the final decision on certification. Each Division on Practice may have its own specific requirements in addition to the basic requirements listed above. Certification is valid for a five-year period, after which time an individual may submit credentials for re-certification as required by the specific Division of Practice.

The ANA certification is stringent. It is currently useful to nurses in obtaining merit raises and promotion. In the future, certification may be linked to reimbursement mechanisms for nursing services or may be required for specialty practice. It is not a basis for job requirements, although in Pennsylvania a nurse acting as a patient advocate for involuntary commitment proceedings in the mental health area must be certified by the ANA.

The Nurses Association of the American College of Obstetricians and Gynecologists (NAACOG) Certification Corporation sponsors a voluntary certification program for neonatal nurse clinician/practitioners and obstetrical/gynecological nurse practitioners. Eligibility requirements include verification of current licensure as a Registered Nurse and completion of a formal training program approved by NAACOG Certification Corporation (NCC) or practical experience in the specialty area. Candidates must successfully pass the NCC certification examinations.

The National Board of Pediatric Nurse Practitioners and Associates (PNP/As) also offers a voluntary certification examination for pediatric nurse practitioners. Applicants must be currently licensed as a Registered Nurse and be a graduate of a formal pediatric nurse practitioner/associate program listed with the National Board of PNP/As.

CLIMATE FOR CONTINUING EDUCATION

The licensing boards are still in the process of determining exact requirements for approved programs for C.R.N.P.s and what will constitute "evidence of competency" for recertification.

It is currently proposed that the course of study preparing an R.N. for C.R.N.P. certification be based in college credit, and approved continuing education credits be required for recertification.

The ANA does not offer courses or study guides and there may be some value in in-depth courses to prepare for ANA certification. Both NAACOG and the National Board of PNP/As offer certification maintenance programs through documentation of continuing education credits. These programs include at-home programmed learning or self-assessment exercises.

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NURSING
LICENSED PRACTICAL NURSES

Practical nurses must be licensed in order to practice in Pennsylvania. Licensure recipients are permitted to use the title "Licensed Practical Nurse" and the initials "L.P.N."

LICENSING INFORMATION

To be licensed, an individual must:

- I. Be a graduate of an approved practical nursing program. There are fifty-six schools in Pennsylvania offering programs that are approved by the State Board of Nurse Examiners. All practical nursing programs are one year in length, a determination that is set by law.
- II. Pay a fee.
- III. Pass the National Council Licensure Examination. This is a national examination that is offered by the State Board of Nurse Examiners each April and October in Pennsylvania.

Licensure by endorsement may be issued to a graduate of a practical nursing program who has completed a course of study considered to be equivalent to that required in Pennsylvania, and who is licensed by examination with a score of 350 or higher in any other state or territory of the United States or Canada.

RELICENSING INFORMATION

To maintain licensing, an individual must renew the license by July 1 in even-numbered years by paying a specified fee. An additional fee is charged if a license is lost, or as a penalty for late application.

Continuing education requirements: none.

BACKGROUND INFORMATION

The Licensed Practical Nurse Association of Pennsylvania (LPNAP), as a state organization, is part of the National Association for Practical Nurse Education and Service (NAPNES). There are also a number of district organizations throughout the state. This network of local, state, and national organizations maintains an active lobby on state and national levels.

Licensed Practical Nurses describe themselves as striving for recognition. This attitude can be traced to the history of the profession. The first approved educational program for practical nursing was established only twenty-six years ago. Prior to that time, a person could become a practical nurse without any related experience. Many hospitals refused to permit practical nurses to work in their institutions. Practical nurses feel that their profession has been upgraded tremendously since the establishment of

approved educational programs and licensing regulations. However, they are still conscious of having to combat the image that was created earlier when regulation of practical nursing was minimal.

CLIMATE FOR CONTINUING EDUCATION

Continuing education programs are offered through a large number of schools and nursing organizations. Penn State has offered programs for licensed practical nurses. At this time, these programs do not need approval since participation in them is voluntary. However, continuing education providers may apply for program approval offered by NAPNES. If continuing education becomes a relicensing requirement, an approval system will have to be established.

Licensed Practical Nurses generally participate in the same continuing education programs that Registered Nurses attend, although these programs are designed to meet the specific staff development needs of Registered Nurses. Occasionally there are programs offered that are designed primarily for Licensed Practical Nurses.

Participation in voluntary continuing education has been good, according to educators in this field. Hospitals employing Licensed Practical Nurses may pay either the continuing education program registration or the individual's salary for the time spent attending the program, or both. This practice serves to encourage continuing education participation.

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NURSING NURSE-MIDWIVES

In Pennsylvania nurse-midwives are licensed by the State Board of Medical Education and Licensure (BOMEL). Their standards of practice are established by the Task Force on Nurse-Midwifery Practice of the Pennsylvania Department of Health, and approved by the Board.

LICENSING INFORMATION

To be licensed, an individual must:

- I. Be a registered nurse (R.N.) with a current license to practice in Pennsylvania.
- II. Have completed an educational program in nurse-midwifery accredited by the American College of Nurse-Midwives (ACNM) and approved by the Board. All basic education programs are within a university or affiliated with an institution of higher learning. They are either:
 - A. A nine to twelve month clinical program leading to a certificate in nurse-midwifery, or
 - B. A two-year, academic program leading to a master of science degree in nursing (MSN) and a certificate in nurse-midwifery.
- III. Successfully complete the ACNM national certifying examination.
- IV. Pay a fee.

REGISTRATION INFORMATION

Licenses are good for life, but must be registered in order for the individual to practice nurse-midwifery. License registration is accomplished by payment of a registration fee. Registration of licenses for midwives expires biennially, on December 31 of each even-numbered year. Biennial registration fees are determined by the Board.

Continuing education requirements: none.

BACKGROUND INFORMATION

Today, certified nurse-midwives in the United States serve a much broader segment of the population than did their predecessors who, for the most part, served low-income families with limited access to health care.

Health care consumers, especially women, seek greater autonomy in health care decisions and more choice in the kind of health care services available to them. The midwife, in turn, upholds the right to self-determination of consumers; respect for the client has long been the hallmark of nurse-midwifery care. As a result, there has been a growing interest in nurse-midwifery as a viable health care alternative.

More nurse-midwives enter clinical practice each year and services evolve and change. This is particularly so as there have been amendments to state laws which greatly facilitate the practice of nurse-midwifery and increasing numbers of hospitals have granted delivery privileges to nurse-midwives in private practice.

There are currently 2900 nurse-midwives certified by the ACNM, although not all of these practice. There are twenty-eight educational programs and graduating approximately 250 students each year. All states but North Dakota provide licensure for nurse-midwifery practice. In Pennsylvania there are about 170 persons licensed to practice midwifery.

In December, 1981 Governor Thornburgh signed into law Act 168 of 1981 which provides for reimbursement by insurance companies and others for services provided by licensed certified nurse-midwives. In 1982 Governor Thornburgh approved an amendment to Act 168 to include "facilities used by or for services" . . . performed by licensed certified nurse-midwives and "any hospital plan corporation as defined in 40 Pa CS Ch61 . . ."

The Pennsylvania Chapter of the ACNM has about 100 members who hold bimonthly meetings in alternating locations in the state. There are twenty-five nurse-midwifery services and practices in the Commonwealth. Twenty-three practices provide hospital services, six provide birth center services and ten provide home birth services.

The School of Nursing of the University of Pennsylvania established the first basic nurse-midwifery education program in the Commonwealth. It is a two-year program leading to an MSN and certificate in nurse-midwifery.

CLIMATE FOR CONTINUING EDUCATION

Although no continuing education is required for nurse-midwives to retain their licenses, the ACNM has a voluntary program with multiple option offerings at annual meetings. The University of Pennsylvania and the National Association of Childbearing Centers also offer continuing education programs approved by the ACNM and the Pennsylvania Nurses' Association. These programs meet current needs for nurse-midwifery continuing education.

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NURSING
REGISTERED NURSES

The Professional Nursing Law in Pennsylvania provides for mandatory licensing of individuals engaged in the practice of professional nursing by the State Board of Nurse Examiners. Licensure also permits the recipient to use the title "Registered Nurse" and the letters "R.N."

LICENSING INFORMATION

To be licensed, an individual must:

- I. Be a graduate of an approved program of professional nursing in Pennsylvania or any other state where the qualifications for licensure are the same as those in Pennsylvania. Program approval in this state is granted by the Pennsylvania State Board of Nurse Examiners. Approved programs include:
 - A. Diploma programs,
 - B. Two-year programs leading to an Associate Degree in Nursing, and
 - C. Bachelor of Science in Nursing programs.
 - II. Pay a specified fee.
 - III. Pass the National Council Licensure Examination (NCLEX-RN). This examination is given twice yearly by the State Board of Nurse Examiners. Applicants for licensure may take the examination upon completion of an approved program as described above, or at any time thereafter.
- A license by endorsement may be issued to a graduate of a state approved school of nursing who has completed a course of study in nursing considered to be equivalent to that required in Pennsylvania at the time such course was completed, and who is licensed by examination in any other state or territory of the United States or Canada.

RELICENSING INFORMATION

Licenses expire biennially on the thirty-first day of October of odd-numbered years. Relicensing is accomplished by completion of an application form and payment of a relicensing fee.

Licensed nurses may apply for inactive status. Upon receipt of the appropriate completed application form, the applicant shall be placed on inactive status without fee and shall be entitled to apply at any time to receive a current license by filing a renewal application and paying the relicensing fee.

Continuing education requirements: none.

BACKGROUND INFORMATION

As the health care field changes, so does the role of professional nurses. There has been continuing discussion within the nursing profession concerning the necessity or desirability of obtaining a baccalaureate degree, and many employers prefer to hire nurses who have graduated from four-year degree programs. Another discussion has focused on the responsibilities R.N.s with varying academic preparation should assume. Because the R.N. designation can be attained with different educational backgrounds, some professionals feel that this designation should not be the sole determinant of an R.N.'s role.

To date there has been no legislation in Pennsylvania requiring the completion of the baccalaureate degree for professional practice. However, those nurses with a B.S.N. have the most options for career mobility, change, and advancement. It is possible that future legislation might require baccalaureate degrees for nurses beginning practice. Currently, diploma granting programs are decreasing in number and there are more nursing students enrolled in baccalaureate degree programs than in all other nursing programs combined. These trends may point the way for the future of professional nursing preparation.

The American Nurses' Association (ANA) Cabinet on Nursing Services offers two certification programs which are conducted by the certification board for nursing administration. The certification programs in nursing administration are available to nurse administrators, consultants, and educators engaged in nursing service administration at the middle management or executive level on a full- or part-time basis. There are two levels of nursing administration certification programs: nursing administration and nursing administration-advanced.

CLIMATE FOR CONTINUING EDUCATION

There has been a decrease in the number of continuing education programs provided by colleges and universities in Pennsylvania. Other institutions, such as hospitals, visiting nurse organizations, and private companies, are offering increased numbers of educational programs. Many of these programs are submitted to the Pennsylvania Nurses Association (PNA) for approval. PNA is accredited as an approver and provider of continuing education by the Eastern Regional Accrediting Committee of ANA. This same accrediting body has accredited Penn State's Department of Nursing as a provider of continuing education.

PNA currently supports a voluntary system for continuing education for professional nurses in the Commonwealth. Participation in the voluntary program had grown steadily in the past few years. In 1983 alone, 25,000 Registered Nurses received CEUs from PNA-approved programs. The first half of 1984 saw a 14 percent increase over the same period in 1983 in offerings submitted for approval. At Penn State, participants engaged in 150 programs in the 1980-81 program year.

There are no concrete data demonstrating that fewer nurses are participating in continuing education, but interest in nontraditional types of learning appears to be increasing, according to resource persons. Several

journals are publishing self-study modules for which nurses can receive continuing education recognition. PNA currently has criteria for self-directed learning activities whereby nurses can receive recognition. Additionally, PNA is sponsoring international study tours, a program approval process for a total continuing education program, and is initiating a continuing education referral service.

A fringe benefit for Registered Nurses in many hospitals is reimbursement for credit courses which are completed successfully. Fewer agencies are paying for continuing education program registration. Agencies vary in their policies regarding provision of compensatory time for attending continuing education programs.

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NURSING HOME ADMINISTRATION

Nursing home administrators, including any individual who is charged with the general administration of an institution or facility in which nursing care and related health services are provided for a period exceeding twenty-four hours, for two or more individuals not relatives of the administrator, must be licensed by the State Board of Examiners of Nursing Home Administrators. They are the only health care administrators for whom there is any licensure in Pennsylvania.

LICENSING INFORMATION

To be licensed, an individual must:

- I. Be at least twenty-one years of age or older and of good moral character.
- II. Meet ONE of the following options:
 - A. Option 1. Prior to January 1, 1977:
 1. Be a high school graduate.
 2. Have worked for the twenty-four months immediately preceding application as an assistant or associate nursing home administrator under the supervision of a licensed administrator.
 3. Have completed six hours in a Board-approved program of study.
 - B. Option 2. On or after January 1, 1977:
 1. Have completed two years of college.
 2. Have completed six hours in a Board-approved program of study.
 3. Meet ONE of the following requirements:
 - a. Have worked for the eighteen months immediately preceding application as a full time assistant nursing home administrator or co-administrator under the supervision of a licensed administrator, or
 - b. Have worked for thirty-six months in the preceding five years in a nursing home or health care facility, 1000 hours of which time must have been spent in nursing home administration.

C. Option 3. On or after January 1, 1977:

1. Have completed two years of college.
2. Have completed six hours in a Board-approved program of study.
3. Be a registered professional nurse, licensed in Pennsylvania, who is a director of nursing.
4. Meet ONE of the following requirements:
 - a. Have worked for the twelve months immediately preceding application as a full-time assistant nursing home administrator or co-administrator under the supervision of a licensed administrator, or
 - b. Have worked for twenty-four months in the preceding five years as director or assistant director of nursing in a nursing home or health care facility, 1000 hours of which time must have been spent in nursing home administration.

D. Option 4.

1. Hold a baccalaureate degree from an accredited college.
2. Have completed six hours in a Board-approved program of study.
3. Meet ONE of the following requirements:
 - a. Have worked for the nine months immediately preceding application as a full-time assistant nursing home administrator or co-administrator under the supervision of a licensed administrator, or
 - b. Have worked for eighteen months in the preceding five years in nursing home or health care facility administration, 1000 hours of which time must have been spent in nursing home administration, or
 - c. Have worked full-time for two or more of the preceding five years as a hospital or health care facility administrator.

E. Option 5.

1. Hold a master's degree or equivalent from an accredited college or university in nursing home administration or health-related areas.

2. Have a minimum of six months of full-time experience in nursing home or health care facility administration. The experience may be gained as part of the master's degree program.

III. Pass an examination given by Professional Examination Service and a written and/or oral examination conducted by the State Board.

IV. Pay a fee.

In lieu of the educational requirements stated above an applicant may substitute practical experience in nursing home or health care facility administration. The State Board shall review such credentials on a case-by-case basis.

RELICENSING INFORMATION

Everyone holding a valid license as a nursing home administrator shall be deemed registered with the Board. A new certificate of registration must be applied for biennially.

To be re-registered, an individual must:

- I. Submit evidence of attendance, during the immediately preceding biennial period, at Board-approved continuing education program(s) or courses of study of not less than forty-eight hours.
- II. Pay a registration fee.

BACKGROUND INFORMATION

Licensing of nursing home administrators started nationwide in 1970. At that time a Federal regulation stated that any nursing home or extended care facility wishing to participate in Medicare and Medicaid programs would have to have a licensed administrator by 1972. Between 1970 and 1978 all states adopted legislation on the licensing of nursing home administrators.

Over 100 colleges and universities in the country have degree programs in health care administration. The Pennsylvania State University, the University of Pittsburgh, the University of Pennsylvania, and Temple University offer such programs in Pennsylvania. Eighty-one percent of Penn State's health planning and administration baccalaureate graduates either find employment in this field or enter graduate school. Penn State has graduated over 1200 baccalaureate students in health planning and administration since 1970.

The American College of Nursing Home Administrators, located in Washington, D.C., is a national professional organization for nursing home administrators. The association has twelve regional chapters and provisions for state chapters. Membership is open to any person actively engaged in full-time work as a nursing home or extended care facility administrator. The College has approximately 6,200 members, and estimates that there are 24,000 employed nursing home administrators in the country. The number of licensed administrators is greater, but some licensed individuals have retired or entered other lines of work.

Nursing home administrators report that reciprocity is a large problem for them. Each state sets up its own licensing laws, which vary considerably from state to state. Thus an administrator moving from one state to another may be required to go through the entire licensing procedure in the new state. In an attempt to provide some uniform guideline or measurement, the American College recently implemented a certification program for nursing home administrators. This provides a professional designation, based upon passage of an examination. Recertification is required every five years.

The Pennsylvania Association of Non-Profit Homes for the Aging (PANPHA) has approximately 235 institutional memberships. Its member homes care for over 30,000 persons. PANPHA is affiliated with the American Association of Homes for the Aging. The Pennsylvania Health Care Association (PHCA) accepts both for-profit and not-for-profit member institutions, although the majority are proprietary facilities. PHCA, the state affiliate of the American Health Care Association, represents approximately 200 facilities and their 23,000 patients. The Pennsylvania Association of County-Affiliated Homes (PACAH) represents county nursing homes. The primary purpose of these organizations is to further the quality of nursing home care by providing educational programs on nursing home administration and management as well as by educating their members concerning legal issues which affect the manner in which they operate homes.

CLIMATE FOR CONTINUING EDUCATION

Because nursing home administrators are a recently licensed profession, those in the field have recognized the need for continuing education to bring practitioners coming from a wide range of backgrounds to a common standard. The Federal government, when it passed the legislation requiring licensing in 1970, established guidelines for continuing education. These guidelines have been given to each of the states for their consideration, but each state sets its own standards for continuing education.

The American College offers continuing education programs throughout the country, primarily at facilities where chapters of the College are located. PANPHA, PHCA, and PACAH offer workshops, and each sponsors an annual conference. There is a strong market for continuing education in this area. Not only nursing home administrators, but managers of rural medical centers and small health agencies (such as home health care, family planning centers, etc.) would provide a substantial target audience. The Penn State Health Planning and Administration program is interested in, and has the capability for, continuing education programs to meet the needs of nursing home administrators. Penn State has offered programs for this audience in the past.

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OCCUPATIONAL THERAPY

Pennsylvania recently adopted an Occupational Therapy Practice Act which mandates licensure for occupational therapists in Pennsylvania. A State Board of Occupational Therapy Education and Licensure administers the act. In addition, voluntary national certification and registration is provided by the American Occupational Therapy Association (AOTA).

LICENSURE AND CERTIFICATION INFORMATION

To be licensed to practice occupational therapy in Pennsylvania, an individual must:

- I. Be of good moral character.
- II. Have completed a Board-approved educational program in occupational therapy as follows:
 - A. For an occupational therapist, a four-year program or its equivalent, or
 - B. For an occupational therapy assistant, a two-year program or its equivalent.
- III. Have successfully completed a period of supervised fieldwork experience at a recognized educational institute or training program approved by the educational institution:
 - A. For an occupational therapist, a minimum of six months, or
 - B. For an occupational therapy assistant, a minimum of two months.
- IV. Pay a fee set by the Board.
- V. Successfully complete a Board-approved written examination, which is given twice a year.

Licenses were issued without examination to individuals' who are AOTA-certified occupational therapists, providing they applied for licensure prior to September 13, 1983.

Foreign trained occupational therapists may take the licensure examination if they have completed educational requirements equivalent to Pennsylvania's. The Board also may require them to complete up to one year of prescribed supervised fieldwork.

A temporary license may be granted to occupational therapists from other states if the licensure, registration, or certification requirements under which they are practicing are equivalent to Pennsylvania's licensure requirements. Occupational therapy students who have completed their fieldwork and are waiting to take the registration examination also may apply for a temporary license.

To be certified as an Occupational Therapist, Registered (OTR) by AOTA, an individual must:

I. Meet ONE of the following options:

- A. Have a baccalaureate degree in occupational therapy from a program accredited by both AOTA and the Committee on Allied Health Education and Accreditation of the American Medical Association, or
- B. Have a baccalaureate degree in a related field, plus a master's degree in occupational therapy, or
- C. Have a baccalaureate degree in a related field, plus a certificate in occupational therapy; or
- D. Have a degree in occupational therapy from a World Federation of Occupational Therapy approved school or a curriculum approved by the AOTA Certification committee, or
- E. Be a certified occupational therapy assistant and have completed the AOTA Career Mobility Program.

II. Complete a minimum of six-months of supervised internship in occupational therapy at an established student training center. After completing the internship, the individual is rated on a national evaluation instrument for assessment purposes.

III. Pass an examination and pay an examination fee. The examination is offered twice a year.

IV. Pay a certification fee.

To become a Certified Occupational Therapy Assistant (COTA), an individual must:

I. Be a graduate of an AOTA approved occupational therapy assistant educational program and have successfully completed at least two months of assistant level fieldwork and as many months of assistant level fieldwork as is required by the educational program.

II. Pass the Certification Examination for Occupational Therapy Assistant.

III. Pay a certification and registration fee.

RELICENSURE AND RECERTIFICATION

To maintain Pennsylvania licensure, an individual must renew the license biennially by paying a specified fee.

To maintain AOTA certification, an individual must pay an annual renewal fee.

Continuing education requirements: none.

BACKGROUND INFORMATION

Licensure for the practice of occupational therapy is required in seventeen states and pending in several others. Although the majority of occupational therapists are registered, AOTA feels that many unqualified people are practicing occupational therapy, creating a need for greater control over practitioners. Pennsylvania's new licensure act prohibits individuals from practicing occupational therapy unless they are licensed or are working under the supervision of a licensed occupational therapist. Therapists may not provide direct occupational therapy to individuals for specific medical conditions unless the client has been referred specifically by a licensed physician or podiatrist. All practicing occupational therapists in Pennsylvania, with a few exceptions, had to be licensed by 1983 in order to continue using the title "occupational therapist." The practice act also includes licensure requirements for occupational therapy assistants.

CLIMATE FOR CONTINUING EDUCATION

Although at this time continuing education is not mandatory, resource persons suggest that it is highly desirable due to rapid developments in the field. The Occupational Therapy Practice Act contains a clause which allows the Board to establish criteria for license renewal which might include mandatory continuing education. In the future it is possible that such a requirement might be adopted.

Continuing education is offered on a large scale through AOTA on both national and state levels. In Pennsylvania, continuing education also is offered at two of the five schools which have accredited occupational therapy programs: Temple University and Elizabethtown College. There is active participation in the programs. Thomas Jefferson University, University of Pittsburgh, and the College of Misericordia all have developed occupational therapy programs recently but are less active as continuing education providers.

AOTA has proposed that a written examination every five years and/or annual continuing education be required for recertification. However, this suggestion has not been implemented. The Association currently is studying the issue of advanced level certification. A report on this topic and recommendations will be presented to the AOTA Representative Assembly in 1985.

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OPTOMETRY

The State Board of Optometrical Examiners licenses Doctors of Optometry to practice optometry in Pennsylvania. It is unlawful for any person to practice optometry or hold himself/herself out as a practitioner of optometry in Pennsylvania unless he/she is licensed by this Board.

LICENSING INFORMATION

To be licensed to practice optometry an individual must:

- I. Hold a Doctor of Optometry degree from an accredited optometric educational institution in the United States or Canada.
- II. Be at least twenty-one years old, have completed the educational requirements prescribed by the Board, and be of good moral character. An applicant must not be addicted to alcohol, narcotics, or other habit-forming drugs.
- III. Pay an application fee.
- IV. Pass specified examinations. As of July, 1981, an individual must pass all parts of a written examination given by the National Board of Examiners in Optometry. The three parts of this examination generally are taken during the second, third, and fourth year of optometry school. An individual must also pass the state-developed practical examination, a test given twice a year at the Pennsylvania College of Optometry.
- V. Pay a registration fee.

Licensure requirements do not apply to optometrists employed in the United States Armed Forces, the Public Health Service, the Veterans' Administration, or other federal services.

Licenses without examination may be issued to optometrists who have passed a standard examination in optometry in any other state or all parts of the examination given by the National Board of Examiners in Optometry, provided that the examination standards are equivalent to those in Pennsylvania. An optometrist who is licensed in another state and has practiced in that state for at least four years immediately preceding application to Pennsylvania also may be licensed without examination other than clinical. The Board may impose additional uniform educational requirements before granting a license without examination.

RELICENSING INFORMATION

Relicensure is obtained by paying a biennial fee.

Continuing education requirements: Optometrists must complete a minimum of twenty-four hours of Board-approved continuing professional optometric education during the two-year licensure period to qualify for license renewal.

BACKGROUND INFORMATION

The Pennsylvania College of Optometry in Philadelphia is the only college of optometry in Pennsylvania. The college requires a minimum of three years' undergraduate education for admission, but in practice very few students are admitted without a B.S. degree, and some have M.S. degrees. The undergraduate coursework must include a number of science courses. For individuals admitted with three years of undergraduate work, the fourth year can be taken during the first year of optometry college, with a B.S. degree awarded at the end of that year. The four year optometry program leads to the Doctor of Optometry (O.D.) degree.

The field of optometry has several specialty areas. National certification of these specialties is not established, although a movement is underway to develop specialty certification. Specialties include contact lenses, visual therapy, and visual rehabilitation. An optometrist can limit his or her practice to a specific area.

The American Optometric Association (AOA) is the national professional association of optometrists. There are also state and local chapters. The Pennsylvania Optometric Association (POA) is a particularly strong association and is very active as a lobby group.

There are approximately 1,100 active licensed optometrists in Pennsylvania.

CLIMATE FOR CONTINUING EDUCATION

Continuing education for optometrists is extensive. It is offered through various professional associations as well as the colleges of optometry.

AOA offers the Optometric Recognition Award, a voluntary program whereby members must complete 150 hours of continuing education within three years to obtain the award. Thereafter, fifty hours of continuing education are required annually.

The American Academy of Optometry is a national organization that offers educational programs and provides a forum for research.

The Pennsylvania College of Optometry has a well developed program of continuing education and delivers these services throughout the state. POA and its 14 local societies also sponsor continuing education. If the programs are to apply for credit towards the Optometric Recognition Award, it must be approved by AOA. Otherwise, POA is approved to provide programs in the state. Approximately six hours of continuing education are annually offered by some local societies, and more than forty hours are annually offered through POA. Several other regional and district programs are held; the advisability of a society's offering its continuing education programs through a continuing education center has been stressed. In such cases, expertise is generally provided by professionals in the field or faculty members from the Pennsylvania College of Optometry, while all facilities and arrangements are handled by the continuing education center.

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PERSONNEL MANAGEMENT

There is no mandatory licensure or certification of personnel managers. However, three types of voluntary national certification exist. Personnel generalists and specialists may be certified by the Personnel Accreditation Institute (PAI). The American Compensation Association (ACA) certifies compensation specialists, and the Wharton School of Business, in cooperation with the International Foundation of Employee Benefit plans, sponsors a Certified Employee Benefit Specialist program.

CERTIFICATION INFORMATION

PAI offers two categories of accreditation, with two levels of accreditation within each category. The term accreditation is used synonymously with certification by PAI. Individuals are accredited as personnel specialists or generalists at the basic or advanced level.

To become an Accredited Personnel Specialist (APS), an individual must:

- I. Have six years of experience in the field. Education may be substituted up to a maximum of five years.
- II. Submit two professional service related references.
- III. Successfully complete a functional area examination at the specialist level. Functional areas include employment, placement, and personnel planning; training and development; compensation and benefits; health; safety, and security; employee and labor relations; and personnel research.
- IV. Pay a fee.

To become an Accredited Personnel Diplomat (APD), an individual must:

- I. Have ten years of experience in the field. A maximum of five years of education may be substituted for the experience requirement.
- II. Submit four professional service related references.
- III. Successfully complete a functional area examination at the diplomat level.
- IV. Pay a fee.

To become an Accredited Personnel Manager (APM), an individual must:

- I. Have six years of experience in the field. Education may be substituted for the experience requirement up to a maximum of five years.
- II. Submit two professional service related references.
- III. Successfully complete the generalist examination at the APM level. The comprehensive examination covers the functional areas described above as well as management practices.

IV. Pay a fee.

To become an Accredited Executive in Personnel (AEP), an individual must:

- I. Have ten years of experience in the field. A maximum of five years of education may be substituted for the experience requirement.
- II. Submit four professional service related references.
- III. Successfully complete the generalist examination at the AEP level.
- IV. Pay a fee.

Degree candidates and recent college graduates may take either of the basic level examinations even though they do not meet the work experience requirements. If they pass the examination and complete the specific experience requirements within three years, full accreditation will be granted as soon as they submit evidence of meeting the work experience requirements. There is a fee for this provision.

Certification of practitioners specializing in compensation is offered by the ACA's Certified Compensation Professional Program, which includes nine courses in the compensation field which are offered in various cities.

To become a Certified Compensation Professional (CCP), an individual must:

- I. Earn a score of 75 percent or better on examinations for Courses I through IV, and one additional examination chosen from Courses V through IX. These requirements must be completed within a forty-eight month period. An individual need not take the formal coursework through ACA before sitting for an examination.
- II. Pay an examination fee per examination. Individuals specializing in employee benefits may become Certified Employee Benefit Specialists through a program co-sponsored by The Wharton School of the University of Pennsylvania and the International Foundation of Employee Benefit Plans. The Certified Employee Benefit Specialist Program includes a series of ten courses offered through correspondence study of formal classes throughout the United States.

To become a Certified Employee Benefit Specialist, an individual must:

- I. Successfully complete a series of ten examinations covering specialty areas within the employee benefits field. Courses are available to prepare individuals for the examinations, but such coursework is not required.
- II. Pay an initial registration fee and an examination application fee.

RECERTIFICATION INFORMATION

Individuals accredited through the PAI must be reaccredited every three years.

To be reaccredited, an individual must:

- I. Successfully complete a written examination consistent with the type and functional area of the original accreditation and at the appropriate level, or
- II. Earn three reaccreditation units (RUs) through a variety of specified activities, including continuing education coursework, teaching, publishing, research, and other certification programs. One RU is equivalent to two Continuing Education Units (CEUs).
- III. Pay a fee.

The ACA currently has no provisions for recertification.

Certified Employee Benefit Specialists currently need not participate in continuing education to remain certified. However, future plans of the sponsoring organizations include developing a continuing education program which may become mandatory for recertification.

BACKGROUND INFORMATION

The personnel field is very broad, encompassing persons working as generalists or specialists in a wide variety of settings. While large organizations may employ a whole personnel staff with specialists in particular areas, smaller companies often have just one personnel manager, the personnel generalist. In some very small business, personnel management might be assumed by a person with other administrative responsibilities. Personnel specialists work in such areas as selection, placement, and personnel planning; training and development; compensation and employee benefits; health, safety, and security; employee and labor relations; personnel research, and performance appraisal. Personnel generalists are practitioners whose management responsibilities span multiple function areas.

A college education is generally an entry level requirement in personnel management, and some administrators have a graduate degree in a field such as industrial psychology or business. Increasingly, personnel managers in large corporations are persons who have had administrative experience in other business areas within the company. Although a broad variety of academic backgrounds is acceptable, some personnel management coursework is desirable. Because of the preponderance of federal regulations, the need for expertise in the personnel field is increasing. Certification can offer personnel managers that needed expertise as well as provide updated knowledge. Currently, however, certification is strictly voluntary.

Several national professional associations exist; the largest for personnel managers is the American Society for Personnel Administration (ASPA), which was formed in 1948. There are twelve local chapters in Pennsylvania, and they usually hold regular meetings which include an educational component and a time to share ideas and problems. ACA is geared specifically to practitioners in the compensation field. Although it does not have local chapters, there are unaffiliated compensation associations in some major cities in the United States. The International Foundation of Employee Benefit Plans, established in 1954, is the largest educational association in the employee benefit field; it co-sponsors the Certified Employee Benefit Specialist Program. The American Society for Training and Development (ASTD)

serves the professional needs of specialists in training, adult education, and human resource development. ASTD has operated for over thirty years and has a network of about 100 chapters nationwide. The American Management Association (AMA) includes persons in all types of management situations; it has insurance and employee benefits and human resources divisions.

CLIMATE FOR CONTINUING EDUCATION

Only PAI's accreditation program currently mandates continuing education for reaccreditation. However, continued professional development is encouraged by all the national professional associations, and each offers a variety of educational programs. ASPA conducts many seminars covering a wide range of personnel-related topics. Seminars are sponsored by affiliated local chapters, and are held in cities throughout the United States. The International Foundation of Employee Benefit Plans also sponsors educational meetings. ASTD and ACA also provide some continuing education programming through conferences, seminars, and institutes. AMA holds an annual human resources conference, and in addition conducts approximately fifteen courses for personnel generalists or specialists. Each lasts two to five days and is held in a major city.

Although these professional associations offer a variety of training opportunities nationwide, many sections of Pennsylvania, particularly the western region, are distant from the program locations. In addition, the courses are often several days long, and many managers have difficulty scheduling such courses. With the increasing number of complex federal regulations, personnel managers or specialists have a great need for updated information. Persons who perform personnel management functions, but hold additional positions within small companies as well, have a need for continuing education programming which would increase their expertise in the personnel field. One-day workshops or courses which meet weekly for several weeks probably would attract individuals in the personnel field.

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PHARMACY

In Pennsylvania the practice of pharmacy is regulated by the Pennsylvania State Board of Pharmacy. This Board provides for the mandatory licensure of individuals who practice pharmacy in the Commonwealth.

LICENSING INFORMATION

To be licensed to practice pharmacy, an individual must:

- I. Be eighteen years of age or over.
- II. Be a graduate of an approved school or college of pharmacy.
- III. Meet internship requirements which include working a minimum of 1,500 hours under the guidance of a registered approved pharmacist-preceptor and scrutinizing at least 2,500 prescriptions.
- IV. Pay an examination fee.
- V. Pass an examination. This examination is national and runs for two days. There are two parts: theoretical and practical. Examination sites are in Pittsburgh and Philadelphia.
- VI. Pay a registration fee.
- VII. Pay a certification fee.

RELICENSING INFORMATION

Licenses are renewed biennially with the payment of a specified fee.

Continuing education requirements: There are no continuing education requirements, although a new pharmacy bill will be introduced soon which would require continuing education for relicensure. People in the field feel confident that it will pass, and that it is very necessary.

BACKGROUND INFORMATION

Approximately 12,900 pharmacists are registered in Pennsylvania. There are two main areas of pharmacy practice, community and hospital pharmacy. Some pharmacists also go into manufacturing and education.

There are three major pharmacy professional associations, the American Pharmaceutical Association, the American Society of Hospital Pharmacists, and the National Association of Retail Druggists.

The four schools of pharmacy in Pennsylvania are Temple University, Duquesne University, The University of Pittsburgh, and the Philadelphia College of Pharmacy and Science.

CLIMATE FOR CONTINUING EDUCATION

Because of continuing technical and professional advancements and an increased demand for more comprehensive service, it is extremely critical that pharmacists be kept up to date. Many practitioners feel that an individual cannot function as a pharmacist without continuing education.

Although there is no mandatory continuing education requirement for licensure or professional association membership, voluntary continuing education in many forms exists for pharmacists. The continuing education programs currently available are conducted by colleges of pharmacy and professional associations. In addition, some pharmaceutical manufacturers conduct seminars and representatives of the manufacturers provide information on new products as well as home study materials. Professional journals also include some continuing education coursework.

Some of the larger hospitals require inservice training of their pharmacists. Another source of information is the pharmacy journals, some of which print monthly articles on specific topics followed by a self-quiz. Several references, such as Pharmacy Index and Facts and Comparisons, feature new and discontinued products, packaging innovations, and monographs on selected topics.

The younger generation of pharmacists in particular is pushing for continuing education to complement their clinical environment training; however there are some pharmacists who do not support a continuing education requirement.

In addition to pharmacy subject matter courses, continuing education offerings dealing with such subjects as operating a small business and the psychology of better relations with patients and physicians would be beneficial to pharmacists.

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PHYSICAL THERAPY

Pennsylvania has mandatory licensure for the practice of physical therapy. The Pennsylvania Physical Therapy Practice Board is the licensing body.

LICENSING INFORMATION

To be licensed to practice physical therapy in Pennsylvania, an individual currently must:

I. Meet ONE of the following education requirements:

- A. Have a baccalaureate degree in science or physical therapy, or
- B. Have a baccalaureate degree in a science field and a master's degree in physical therapy, or
- C. Have a baccalaureate degree in a science field and a certificate in physical therapy indicating completion of a twelve-month program of graduate study in physical therapy.

Note: Education requirements are expected to change by 1990, at which time a master's degree will be required for entry into practice.

II. Pay a fee.

III. Obtain a score of 75 percent or better on the physical therapy licensing examination. The examination, prepared by Professional Service Examinations, is a one-and-a-half day state written test given each May or June and October.

Pennsylvania grants licenses by reciprocity to individuals licensed by all other states except New York, California, and New Mexico.

RELICENSING INFORMATION

Licenses are renewed annually by payment of a fee.

Continuing education requirements: Continuing education requirements for specialty areas are set annually.

BACKGROUND INFORMATION

There are 1,500 to 2,200 licensed physical therapists in Pennsylvania. The State Physical Therapy Practice Board surveys physical therapy practice in the Commonwealth, checking for practice by non-licensed individuals and investigating reports of malpractice.

Requirements for licensure and relicensure of physical therapists are undergoing rapid changes which will continue during the next six years. The American Physical Therapy Association is suggesting that a prescribed number of continuing education units be added as a requirement for relicensure, and

Pennsylvania is expected to adopt that requirement within the next few years. By 1990, a master's degree will be required for licensure and entry into the job market.

The physical therapy departments of most institutions expect their staff members to belong to the Pennsylvania Physical Therapy Association and its parent organization, the American Physical Therapy Association (APTA). The national organization exerts a strong influence on the profession, to the extent of effecting state licensure requirements through their APTA guidelines. The Pennsylvania organization is divided into six districts.

There are physical therapy specialty areas in almost all fields of medicine—pediatrics, burns, orthopedics, cardiology, etc. Specialization in any of these areas requires additional continuing education, but no additional certification. The Pennsylvania Bureau of Vocational Rehabilitation requires that physical therapists working with amputees have post-graduate training in prosthetics.

CLIMATE FOR CONTINUING EDUCATION

Pennsylvania offers a substantial amount of continuing education for physical therapists. Most continuing education is provided by the Pennsylvania Physical Therapy Association and by the local districts, although the University of Pittsburgh, Temple University, and hospital therapy departments within each district offer some programs. Continuing education in specialty areas will require considerable travel, as courses are given in larger geographic regions rather than within each state.

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PHYSICIAN ASSISTANTS

Under Act 79, amending the Medical Practice Act of 1974, the State Board of Medical Education and Licensure certifies and controls the practice of physician assistants (PAs) who work with MDs in Pennsylvania. The Osteopathic Medical Practice Act of 1978 certifies and controls the practice of PAs who work with osteopathic physicians in Pennsylvania.

CERTIFICATION INFORMATION

To be certified as a PA under the Medical Practice Act, an individual must:

- I. Be of good character and reputation.
- II. Have been graduated from a program for training and education of PAs that is accredited by the American Medical Association's Committee on Allied Health Education and Accreditation.
- III. Pass the national certifying examination developed and given by the National Commission on Certification of Physician Assistants (NCCPA). A fee is charged to sit for the examination.
- IV. Pay an application fee.

To be certified as a PA under the Osteopathic Medical Practice Act, an individual must:

- I. Demonstrate satisfactory performance on the NCCPA examination.
- II. Demonstrate satisfactory completion of a certified program for the training and education of PAs.

A PA must be supervised by a registered supervisory physician. The supervising physician must register as such with the State Board of Medical Education and Licensure, paying a registration fee. A physician may supervise no more than two PAs.

RECERTIFICATION INFORMATION

PAs working with either a medical doctor or an osteopathic physician must renew certification biennially. To renew certification, an individual must:

- I. Maintain national certification by the NCCPA, which requires 100 hours of continuing medical education (CME) biennially. A minimum of forty of those hours must be earned in Category I. The remaining sixty hours may be taken from Category II or a combination of Category I and Category II experiences. The American Academy of Physician Assistants maintains a record of CME hours for all PAs certified by NCCPA or hours may be logged directly with NCCPA.
- II. Pay a biennial renewal fee.

- III. A recertification examination must be successfully completed every six years.

BACKGROUND INFORMATION

PAs are members of a new category of allied health workers that has developed during the past decade. The concept for this profession came from ex-military corpsmen who wanted to put their experience to use in civilian settings. While PAs do not see their role as overlapping with that of nurses, they recognize a number of similarities between the functions of PAs and nurse practitioners.

Forty-five states have enacted legislation regarding the utilization of PAs. Pennsylvania has regulatory legislation, as described above, and regulations prescribing the functions a PA may perform.

The American Academy of Physician Assistants has about 8,500 members, and the Pennsylvania Society approximately 550. There are believed to be 16,000 to 17,000 practicing PAs in the country. The profession is growing rapidly, with about 1,500 people graduating from PA programs annually. The program at Hershey Medical Center is now graduating approximately thirty PAs each year. Employment of PAs within their field is 95 percent or higher.

There has been some movement toward specialization of PAs, especially in the surgical area. There are now several postgraduate surgical PA educational programs, and there is a specialty Board examination for surgical PAs.

CLIMATE FOR CONTINUING EDUCATION

Most of the AMA-approved Category I CME programs for physicians are open to PAs. The American Academy of Physician Assistants also conducts CME programs. Hahnemann Medical College and Hospital and Geisinger Medical Center conduct quite a few CME programs specifically for PAs.

As the number of PAs increases, the need for CME programs for them will grow. Suggested CME topics include role development for PAs, a preparation course for the certifying examination, and discussion forums or panels tailored to the professional needs of PAs.

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PODIATRY

The State Board of Podiatry Examiners licenses individuals to practice podiatry in the Commonwealth of Pennsylvania. It is unlawful for any person to practice podiatry or assume the title of "Podiatrist," "Foot Specialist," or any other title, name, or description implying qualification to practice podiatry unless he/she is licensed by the Board.

LICENSING INFORMATION

To be licensed to practice podiatry, an individual must:

- I. Complete a minimum of one year of college education in the liberal arts or sciences.
- II. Graduate from a school of podiatry.
- III. Pay an application fee.
- IV. Successfully pass two examinations: The National Board, Parts I and II, and an examination developed by the State Board of Podiatry Examiners.

The National Board is a science oriented three day written examination. The examination is given at each of the six podiatry schools in the country. An examination fee is charged.

The one-day State Board Examination is written and comprehensive. It is given in June and September in Philadelphia. A grade of 75 percent is needed to pass, and applicants cannot score below 55 percent on any portion of the examination.

- V. Pay a registration fee.

REREGISTRATION INFORMATION

Licenses are renewed biennially with payment of a registration fee. A podiatrist also must submit evidence of carrying malpractice insurance.

Continuing education requirements: A podiatrist must complete sixteen hours of approved continuing education every two years.

BACKGROUND INFORMATION

The field of podiatry has been upgraded over the past two decades. Podiatrists are now accepted on hospital staffs, receive third party reimbursement on all major medical insurance plans, and have patients referred to them by physicians.

There are six schools of podiatry in the United States including the Pennsylvania College of Podiatric Medicine in Philadelphia. The schools offer a four-year program culminating in the granting of a Doctor of Podiatric Medicine (D.P.M.) degree.

Admission requirements to the Pennsylvania College of Podiatric Medicine require a minimum of three years of undergraduate college work including a year's study in each of these sciences: biology, general chemistry, organic chemistry, and physics. However, only about 10 percent of those admitted do not have an undergraduate degree. For those individuals admitted with three years of undergraduate work, a contract option with a cooperating college allows them to complete their fourth undergraduate year as a freshman in the school of podiatry. At the end of that year, they receive a baccalaureate degree from the cooperating college.

The Podiatry Hospital of Pittsburgh is one of three or four podiatry hospitals in the nation. It is a teaching hospital where podiatrists may complete a residency program. Podiatric residencies are available in other general hospitals as well.

Podiatry has five subdivisions within the profession, with certifying boards or specialty groups including surgery, radiology, dermatology, podiatric medicine, and podiatric orthopedics. Other areas of specialization or limited practice that are not nationally formalized include sports medicine, bio-mechanics, and geriatrics.

There are approximately 1,400 practicing licensed podiatrists in Pennsylvania.

A podiatrist will usually employ a podiatric assistant in his office to handle both front office procedures and preparation of patients. These people are generally trained by the podiatrist himself. Nationally, there is only one established program for podiatric assistants. It is an associate degree program at a community college in Maryland. There has been some preliminary action taken to develop additional training programs for podiatric assistants in conjunction with the podiatry colleges. A lack of funding resources is the primary drawback to implementing these programs.

The American Society of Podiatric Assistants (ASPA) is the national association for podiatric assistants. Until programs can be developed for podiatric assistants, a strong certification program at the national level cannot be developed. National membership in ASPA is about seven hundred with approximately fifty belonging to Pennsylvania chapters. ASPA offers continuing education for its members, and educational programs are also provided for podiatric assistants at the regional meetings of the American Podiatry Association.

CLIMATE FOR CONTINUING EDUCATION

The Pennsylvania Podiatry Act of 1956 implemented an educational requirement for license renewal. Sixteen hours of "scientific" credit every two years must be completed. One scientific credit is equal to one clock hour in a seminar, discussion or other group learning situation. Listening to audio cassettes or journal reading does not qualify. All programs approved for license renewal must be approved by the State Board of Podiatry Examiners.

The Pennsylvania Podiatry Association (PPA) offers many educational programs including regional and divisional conferences and local programs. A surgical seminar is offered once a year and draws national and international participants.

Podiatrists may also participate in continuing education programs provided by colleges and hospitals, but the programs must first be approved by the Pennsylvania State Board of Podiatry Examiners if they are to be used to meet reregistration requirements.

In January 1981, the American Podiatry Association (APA) initiated a voluntary program of continuing education which recommends 150 credits every three years. Sixty of the credits should be scientific and obtained in structured learning situations; the remaining ninety may be obtained through attending hospital staff meetings, writing journal articles, or listening to audio-cassettes. Successful completion of the three-year program and payment of a fee will qualify the APA member for the Podiatry Recognition Award.

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PRIVATE SECURITY

There is no mandatory certification or licensure of private security professionals in Pennsylvania. Voluntary certification is available through the American Society for Industrial Security (ASIS).

CERTIFICATION INFORMATION

To become a Certified Protection Professional (CPP), an individual must:

- I. Meet eligibility requirements as follows:
 - A. Have ten years of security experience, at least half of which shall have been in responsible charge of a security function, or
 - B. Hold an earned associate degree from an accredited college and have eight years of security experience, at least half of which shall have been in responsible charge of a security function, or
 - C. Hold an earned baccalaureate degree from an accredited college or university and five years of security experience, at least half of which shall have been in responsible charge of a security function, or
 - D. Hold an earned master's degree from an accredited college or university and have four years of security experience, at least half of which shall have been in responsible charge of a security function, or
 - E. Hold an earned doctoral degree from an accredited college or university and have three years of security experience, at least half of which shall have been in responsible charge of a security function.
- II. Adhere to the CPP Code of Professional Responsibility.
- III. Be endorsed by a member of the Professional Certification Board or by a person already certified as a Protection Professional.
- IV. Successfully complete the CPP examination, a one-day test comprised of a mandatory knowledge section and four specialty examinations chosen by the candidate from thirteen subjects on security and loss prevention practice. The examination is given on a variety of dates and at a variety of cities throughout the country.
- V. Pay registration and examination/certification fees.

RECERTIFICATION INFORMATION

To remain certified, a CPP must:

- I. Accumulate six professional credits every three years. Credits are awarded for specified activities, including membership in nonprofit professional security associations, attendance at educational programs and courses, service within relevant professional associations, speeches and instruction, and published articles.
- II. Pay a recertification fee.

BACKGROUND INFORMATION

Private security personnel engage in preventing theft and damage in industrial, business, institutional, and retail settings. They hold positions ranging from retail security investigator to security supervisor to director of security. They may be hired directly by a company or might work for a security agency (e.g. Pinkerton) which is contracted to provide private security. The field is expanding and becoming more sophisticated, largely because of an ever-increasing requirement of providing a secure business environment in today's world.

Usually no specific educational qualifications are necessary to enter the field at the security guard level. Often retired police officers or recent high school graduates are hired to fill these positions. Many employers offer in-house training programs for their own security personnel. However, there is considerable feeling among practitioners at management levels that the field needs greater professionalization. Currently few educational programs are designed specifically for private security practitioners and those that are offered are primarily associate degree or certificate programs. Alvernia College and University of Pittsburgh both offer baccalaureate degree programs. Penn State's Administration of Justice program has proposed that a private security option be added to its current baccalaureate degree program. Student demand for such a program is high, according to resource persons.

ASIS is the major professional organization for security personnel. Its certification process offers a form of professional recognition for practitioners who have considerable education and/or experience. ASIS has five local chapters within Pennsylvania. Other more specialized organizations within the security field include the Computer Security Institute, the International Association for Hospital Security, the International Association of College and University Security Directors, and the National Burglar and Fire Alarm Association. The American Society of Security Educators and Trainers (ASSET) is a new organization for persons engaged in educating law enforcement or private security personnel.

CLIMATE FOR CONTINUING EDUCATION

Resource persons consider continuing education to be one vehicle for increasing the professionalism of the private security field. As the CPP recertification requirements indicate, ASIS is very supportive of continuing education. Its annual seminar is a major professional development activity for security practitioners. In addition, the association offers concentrated

two- to five-day workshops on topics of general interest such as terrorist activities, computer security, and investigations. It also offers workshops on specialized security concerns in areas such as telecommunications and utilities. The Security Institute of ASIS sponsors a variety of broad-based security courses including a week-long Assets Protection Course and the Advanced Security Management Program. The Institute also offers a two-day review for the certification examination and holds conferences on selected topics covered in the Assets Protection Courses.

Other continuing education providers include related professional associations, security-related manufacturing companies (e.g. a burglar alarm company), and educational institutions. Penn State has offered some programming for security personnel, and opportunities exist to expand these offerings in the future. The audience that is interested in continuing education programming is likely to be security personnel who hold positions higher than entry level. Programs on private security topics also might be needed by supermarket and retail business owners as well as by other managers who do not specialize in security but must make some security decisions. Store managers must know something about arrest and detention, for instance, particularly in light of the increasing tendency toward litigation.

It has been suggested that non-credit "special topics" courses might be offered for professional updating. Topics which might be of interest to private security practitioners include alarm systems, legal aspects of security, retail theft, computer theft, industrial espionage, and product fraud. Computer theft includes the theft of equipment as well as computer programming violations. Cargo and transportation security might be another topic of interest, according to resource persons. Because technology within the field is changing so rapidly, programs addressing these changes also would be useful.

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PSYCHOLOGY

In Pennsylvania the private practice of psychology (including the use of titles incorporating the words "psychologist," "psychological," or "psychology") is regulated by the Pennsylvania Board of Psychologist Examiners under Act 52. Individuals licensed by the Commonwealth to practice any of the healing arts are exempt from the provisions of Act 52, and persons employed as school psychologists in Pennsylvania's public and private schools as well as psychologists employed by federal, state, county, or municipal agencies are not limited under the Act.

LICENSING INFORMATION

To be licensed, an individual must:

- I. Be of acceptable moral character.
- II. Meet ONE of the following sets of requirements:
 - A. Option 1
 1. Be a graduate of an accredited college or university holding a Ph.D. or D.Ed. degree in psychology or a related field, and
 2. Have two years of post doctorate experience acceptable to the Board, with at least one year being under the direct supervision of a licensed psychologist.
 - B. Option 2
 1. Be a graduate of an accredited college or university holding a master's degree in psychology or another of the behavioral sciences acceptable to the Board, and
 2. Have four years of experience acceptable to the Board, following receipt of the master's degree, with two of the four years being under the direct supervision of a licensed psychologist.

At least two-thirds of an applicant's course work must be psychological in nature. An applicant's educational record must include course work in five basic areas of psychology.

- III. Submit an application and pay a fee.
- IV. Pass the national examination for the professional practice of Psychology and a one-hour state examination which tests the applicant's knowledge of Act 52 and its rules and regulations.

Practicing psychologists who submitted applications to the Board prior to May 23, 1974, could be licensed without examination.

Pennsylvania has no reciprocity agreements with other states. However, an applicant licensed in another state having requirements equivalent to those in Pennsylvania may be licensed in this Commonwealth upon passing the state examination.

RELICENSING INFORMATION

To renew his/her license, an individual must pay a fee biennially. Licenses expire November 30 of each odd-numbered year.

Continuing education requirements: none.

BACKGROUND INFORMATION

Pennsylvania, one of the last states to adopt licensing of psychologists, has provided this licensure since 1972. The Board licensed 2,800 psychologists in Pennsylvania during the 1970's. Act 52 provides licensing only for the private practice of psychology, so that psychologists employed by schools, industries, or government agencies are not required by law to be licensed. However, the Commonwealth now requires that anyone employed as a psychologist in a State Civil Service position be licensed.

The national licensing examination is developed by the American Association of State Psychology Boards. The Professional Examination Service (PES) distributes the examination for administration by the state boards, then scores it. Each state defines its own passing grade.

In addition to the national examination, psychologists wishing to be licensed in Pennsylvania must pass a one-hour, objective examination covering the contents of Act 52 and the state laws, rules, and regulations governing their practice.

There are some efforts within Pennsylvania to change Act 52 so as to require a doctoral degree for licensure. However, there is opposition to this requirement and resource persons do not expect any changes to occur in the near future.

CLIMATE FOR CONTINUING EDUCATION

Because of the volume of work involved in simply implementing licensure, the Board has not had significant time to consider the development of continuing education requirements for relicensure. A continuing education requirement would necessitate an amendment to Act 52. As the Board approaches Sunset Review this possibility will be considered.

A continuing education requirement serves a protective function for the public. If Pennsylvania adopts a continuing education requirement, there will be a need for offerings to enable psychologists to meet it. At the present time, the Penn State Department of Psychology together with other units of the University offers some continuing education programs during the summer months.

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PUBLIC ACCOUNTING

Pennsylvania Law 318, No. 140 (The CPA Law), as amended, provides for the registration of public accountants. Public accountants engaged in the practice of public accounting as principals and as their principal occupation as of December 8, 1976 were eligible to register as Public Accountants. The initial registration period ended September 1, 1979. A subsequent registration period currently is available for those same individuals until May 25, 1985. Those public accountants registered in the Commonwealth will be permitted to practice public accounting and to hold themselves out as "Public Accountants" until they terminate their practice, so long as they meet the requirements of the CPA law. All future entrants will be required to be Certified Public Accountants (CPAs). Therefore, this document addresses itself to the certification and licensure of CPAs.

CERTIFICATION AND LICENSING INFORMATION

Becoming a practicing CPA requires a certificate and a license to practice. Both are issued by the State Board of Accountancy. In order to obtain the CPA certificate, an individual must fulfill the following general requirements. Specific regulations are detailed in The CPA Law, as amended.

- I. Be a resident of Pennsylvania, be enrolled in a college or university in Pennsylvania, or be engaged in public accounting in Pennsylvania at the time he/she first sits for the examination.
- II. Be at least eighteen years of age.
- III. Be of good moral character.
- IV. Meet ONE of the following education requirements:
 - A. Hold a baccalaureate, master's, or doctoral degree from an approved college or university, with twelve semester credits in accounting, or
 - B. Hold a baccalaureate, master's, or doctoral degree from an approved college or university, with twenty-four semester credits in accounting.
- V. Meet ONE of the following experience requirements;
 - A. Individuals holding baccalaureate degrees must have two years of public accounting experience satisfactory to the Board.
 - B. Individuals with master's or doctoral degrees must have one year of public accounting experience satisfactory to the Board.
- VI. Pass the written examination, which currently includes sections on accounting theory, accounting practice, auditing, accounting theory and practice topics, and business law. There is an examination fee.

Individuals at the baccalaureate, master's or doctoral degree level who have less than twenty-four credits in accounting are required to complete the appropriate work experience requirement before sitting for the examination. Individuals with twenty-four credits in accounting may sit for the examination prior to completing the appropriate work experience requirement. Students who have completed twenty-four credits in accounting may be permitted to take the examination during the final term of their senior year if it is reasonably expected that they will fulfill the education requirements and receive the required degree within ninety days after the examination date.

In order to obtain a license to practice public accounting, an individual must:

- I. Hold a current CPA certificate.
- II. Apply for the license.
- III. Pay a fee.

RELICENSING INFORMATION

Licenses to practice as a certified public accountant must be renewed biennially. In the past, biennial licenses have been issued upon payment of a renewal fee, but as of September, 1981, the following conditions must be met for issuance of a biennial license to practice:

- I. Each individual filing an application for a renewal must, during the two-year period immediately preceding, complete eighty hours of continuing education as defined and deemed acceptable by the Board, to include specified numbers of hours dealing with accounting, auditing, and tax subjects. No carry-over of credits shall be permitted from one biennial period to another.
- II. Pay a renewal fee.

BACKGROUND INFORMATION

The CPA examination is a national one, prepared and graded by the American Institute of Certified Public Accountants. Each State defines the examination grade that it will accept as passing. The examination is given in May and November of each year and is two and one-half days long.

In Pennsylvania an individual may take the CPA examination prior to obtaining the experience required for granting of the certificate, if he/she meets an education requirement of twenty-four credits of accounting. If the applicant passes the examination, the certificate will be granted upon completion of the experience requirement.

Only an estimated 15 to 20 percent of those taking the CPA examination pass it each time. The examination is in five parts, and an individual need re-take only those parts failed. There are approximately 200,000 CPAs in the country, and about 15,000 in Pennsylvania. Of these, over 12,000 are members of the Pennsylvania Institute of Certified Public Accountants, which cooperates with but is independent of the American Institute of Certified Public Accountants. Accounting is a field in which the supply of practitioners has

not yet caught up with the demand, and it is projected that the demand will increase in the foreseeable future. There is also a demand for higher education accounting faculty.

CLIMATE FOR CONTINUING EDUCATION

The continuing education requirements for relicensing are quite broad. In the past they included at least thirty-two hours of accounting and auditing, sixteen hours of tax, and the remaining thirty-two hours to be chosen among a wide range of suggested general subject areas. However, there is a proposed regulation to require only sixteen hours of accounting and auditing, and eight hours of taxation. Many states have had similar legislation prescribing mandatory education for some time. The accountants in Pennsylvania have been very much in favor of this legislation, and played an active part in writing the legislation and lobbying for it. CPAs view mandatory continuing education as a means of quality control for their profession.

The American Institute of CPAs has a full-time staff to prepare and publish continuing education courses for use by the state societies. Numerous offerings are given by the Pennsylvania Institute of CPAs throughout the year and in various locations.

Private companies operating nationally appear to handle the examination preparation courses quite satisfactorily. Some of them stipulate that an accountant can re-take their course as often as necessary until passing the full examination. These courses cost from \$400 to \$800; frequently an accountant's employer pays this fee. The in-house continuing education programs offered by some firms serve to keep their employees abreast of current developments in the field, and these courses can be used to meet the relicensure requirements for continuing education.

These three groups appear to meet the needs for continuing education programs in accounting, but there is some likelihood that other organizations, such as institutions of higher education, could perform a valuable function by offering continuing education programs for CPAs in areas other than accounting--management, computer science, economics, and business law, for example. Penn State currently sponsors a Graduate Accounting Conference and a Tax Conference, and other colleges and universities also are beginning to provide continuing education for accountants.

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RADIOLOGIC TECHNOLOGY

Radiologic technologists are registered nationally by the American Registry of Radiologic Technologists (ARRT). There currently is no certification, licensure, or registration of radiologic technologists in Pennsylvania, although state licensure has been proposed.

REGISTRATION INFORMATION

To become a registered radiologic technologist, an individual must:

- I. Complete ONE of the following educational programs.
 - A. A two-year, hospital-based radiologic technology program approved by the Joint Review Committee of the American Medical Association, or
 - B. A college-based associate degree program, or
 - C. A baccalaureate degree program with a major in radiologic technology, which might include a minor in education or business administration for the person wishing to go into the education or management of radiologic technologists.
- II. Pass an examination administered by the American Registry of Radiologic Technologists.
 - A. A fee is charged to take the examination.
 - B. The examination is given the third Thursday of January, July, and October each year.
 - C. The examination consists of 250 questions covering specified information areas.
 - D. A uniform passing score has been established. Radiologic technologists may specialize in diagnostic radiology, nuclear medicine, or radiation therapy. The above-described registration qualifies an individual to work in diagnostic radiology as a radiologic technologist radiographer (R.T.R.). An additional year of training is necessary for specialization as either a radiologic technologist in nuclear medicine (R.T.N.M.) or a radiation therapy technologist (R.T.T.). A radiologic technologist also may specialize in ultrasound, which usually requires an additional year of education.

RE-REGISTRATION INFORMATION

Registration is renewed annually by payment of a specified fee.

Continuing education requirements: none.

BACKGROUND INFORMATION

Several other states license radiologic technologists, and a licensing bill is pending in Pennsylvania. Resource persons expect the bill to be approved soon. Meanwhile hospitals generally require that staff members in this field be registered radiologic technologists, but physicians, chiropractors, and dentists in private practices can and do hire individuals with limited or no training to perform radiological technology functions.

There are approximately 120,000 radiologic technologists registered nationally, and 7,200 in Pennsylvania. The supply of radiologic technologists appears to be in good proportion to the demand, although positions are not always available in all geographic locations.

There is some indication that more education may be required for registered radiologic technologists in the future, including a master's degree for those employed as administrators or educators. Some schools currently offer nine-month radiologic technology programs, but since these programs are not AMA-approved, persons completing the programs are not eligible for registration. Individuals trained in the military as X-ray technologists may not take the registration examination without additional education.

CLIMATE FOR CONTINUING EDUCATION

Radiologic technologists express both a need and an interest in continuing education. The American Society of Radiologic Technologists (ASRT), the national professional organization, has worked in cooperation with ARRT to set up an Evidence of Continuing Education (ECE) program. For a fee, radiologic technologists may join and have a record of their continuing education participation maintained. Although continuing education is voluntary at this time, ASRT and ARRT encourage ECE members to participate in sixty continuing education hours every three years. Continuing education is expected to become mandatory for maintenance of registration in about five years.

The Pennsylvania Society of Radiologic Technologists holds an annual convention at which continuing education programs are offered. The several district chapters within the Commonwealth have monthly meetings (except during the summer) which are educational in nature and for which ECE points are given.

Radiologic technologists also express a need for general academic credit continuing education courses that might be applied to a degree program. An educational gap exists between them and other medical professionals; more general continuing education might help alleviate this problem and enable radiologic technologists to gain an appreciation of what their colleagues in related fields are doing.

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REAL ESTATE

Licenses for both real estate salespersons and brokers are issued by the Commissioner of Professional and Occupational Affairs. The State Real Estate Commission supervises and controls the licensing.

LICENSING INFORMATION

To be licensed as a salesperson, an individual must:

- I. Be eighteen years of age or older and have sponsorship of a broker.
- II. Have completed sixty hours in real estate instruction in areas of study prescribed by the rules of the Commission, including instruction in the areas of fair housing and professional ethics.
- III. Pass an examination administered for the Commission by its appointed testing service.
- IV. Pay a specified fee. If the examination is failed, a partial fee must be paid each time it is retaken.

To be licensed as a broker, an individual must:

- I. Be twenty-one years of age or older.
- II. Be a high school graduate or the equivalent.
- III. Have completed 240 hours in real estate instruction in areas of study prescribed by the rules of the Commission, including instruction in the areas of fair housing and professional ethics. A baccalaureate degree will be considered for a maximum of four credits.
- IV. Have been engaged as a licensed salesperson for at least three years or possess educational or experience qualifications which the Commission deems equivalent.
- V. Pass an examination administered for the Commission by its appointed testing service.
- VI. Pay a specified fee. If the examination is failed, a partial fee must be paid each time it is retaken.

Reciprocity exists with various states which the Commission feels have equivalent standards and requirements. Individuals coming from states with which reciprocity does not exist must take a portion of the respective licensing examination for salespersons or brokers; usually this portion deals with state law.

Limited licensure can be obtained by both salespersons and brokers who deal with the selling of cemetery plots, lots and mausoleum space. A salesperson must register with the Commission and pay a specified fee. A

broker applying for a limited license must pass a limited examination over that specific area, meet the salesperson licensing requirements, have three years of experience as a salesperson, and pay a specified fee.

RENEWAL INFORMATION

Salespersons and brokers must pay a biennial fee. Applications for renewal of real estate broker's or salesperson's licenses should be made by February 28 of even numbered years.

Continuing education requirements: none.

BACKGROUND INFORMATION

Because the word REALTORS is a registered trademark, it will appear in capital letters throughout this report. There are approximately 100 active members of the Centre County Board of REALTORS and about 44,000 active, licensed salespersons and brokers in the Commonwealth. The state professional organization, the Pennsylvania Association of REALTORS (PAR), is affiliated with the NATIONAL ASSOCIATION OF REALTORS (NAR). There are also fifty-five local Boards of REALTORS in Pennsylvania.

Several advanced positions within the real estate profession require some kind of national certification. Most of this certification is provided for through the REALTORS NATIONAL MARKETING INSTITUTE, the educational arm of the NATIONAL ASSOCIATION OF REALTORS, in Chicago. The Institute awards the Certified Residential Specialist (CRS), the Certified Real Estate Brokerage Manager (CRB), and the Certified Commercial and Investment Member (CCIM) designations to qualified individuals.

The licensing examinations for salespersons and brokers in Pennsylvania are national examinations developed by Educational Testing Service, for which each state determines its own passing grade. (Pennsylvania's is 75 percent.) The examination's two portions cover general knowledge and Pennsylvania licensing law. An examination must be passed in its entirety, but an unsatisfactory portion of the examination may be retaken an unlimited number of times. The salesperson and broker examinations are given every month at eleven sites across the state. There is a high failure rate among those taking the examinations.

CLIMATE FOR CONTINUING EDUCATION

Most professionals in the field feel that there is a great need for continuing education, for both basic courses and professional up-dating. PAR recently surveyed real estate licensees to determine their feelings regarding continuing education. Survey results will be used to develop a recommendation about continuing education to be made to the Commission and Pennsylvania Legislature.

Penn State has the largest real estate program in the Commonwealth. Duquesne University and The University of Pittsburgh also have large programs, and many other schools offer programs in real estate. All must submit an outline of their courses to the Commission for approval.

The credits required for licensure can be either college or proprietary school credits, or continuing education units. The Commission recognizes three CEUs as being equivalent to two college credits. Potential licensees can take courses through institutions of higher education, independent real estate schools, or programs offered through real estate professional organizations.

The Pennsylvania REALTORS® Institute, sponsored by PAR, offers programs for continuing education and licensing needs and offers a diploma when three week-long courses are completed. This diploma is growing nationally in status as a designation among REALTORS; the initials "G.R.I." (Graduate REALTORS Institute) may be used after the REALTOR'S name upon its receipt. Each Course, I, II, and III, is accredited for broker's licensure.

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RECREATION AND PARKS

Voluntary certification for recreation and parks personnel is available through the Pennsylvania Recreation and Park Society, Inc. (PRPS), the Pennsylvania affiliate of the National Recreation and Park Association (NRPA). Registration for therapeutic recreation personnel is also available through the National Therapeutic Recreation Society (NTRS), a branch of NRPA.

REGISTRATION INFORMATION

In order to receive provisional professional certification through PRPS, an individual must:

- I. Hold a baccalaureate of higher degree from an NRPA-accredited educational institution with a major in recreation, park resources, and leisure services.

In order to receive professional certification, an individual must meet ONE of the following options:

- I. Hold a baccalaureate or higher degree from an NRPA-accredited educational institution with a major in recreation, park resources, and leisure services; and have at least two years of full-time experience in a recreation, park resources, and leisure services position; or
- II. Hold a baccalaureate or higher degree in any field from an accredited educational institution, be employed full time, and have at least five years of full-time experience in a recreation, park resources, and leisure services position. This option will be eliminated after November 1, 1986.

In order to be registered as a technician, an individual must meet ONE of the following options:

- I. Hold an associate degree from an accredited educational institution with a major in recreation, park resources, and leisure services; or
- II. Hold an associate degree in any field from an accredited educational institution and have at least two years of full-time experience in a recreational, park resources, and leisure services position; or
- III. Hold a high school diploma or equivalency certificate and have at least four years of full-time employment in a recreation, park resources, and leisure services position.

All applicants are required to pay an application fee.

REREGISTRATION INFORMATION

Individuals must renew their certification every two years by meeting continuing education requirements and paying a renewal fee.

Continuing education requirements: Two CEUs or equivalent academic coursework.

BACKGROUND INFORMATION

The field of recreation and parks is very broad and includes persons working in a wide variety of settings such as federal and state institutions, hospitals, recreation and parks departments, youth organizations, commercial and tourist settings, nursing homes, and parks systems. There are many areas of specialization within the field, including outdoor education, therapeutic recreation, industrial recreation, and geriatric recreation. All share a common goal of helping people through more productive use of leisure time.

There are three general levels of recreation and parks personnel. Activity leaders (specialists, therapists) work face-to-face with people in direct helping relationships; for example, they may be playground leaders, outdoor educators, or camp leaders. Coordinators (supervisors, center directors) organize the efforts of the leaders below them; some examples of this level include a nature center director, a YMCA program director, or a creative movement coordinator in a treatment facility. Upper level managers may be called superintendents, executives, administrators, or commissioners; they plan and implement policy. A deputy commissioner of parks, executive director of the Girl Scouts, or director of leisure services would be considered an upper level manager.

Therapeutic recreation is one recreation and parks subgroup that has received increasing attention because of federal laws mandating special services for the handicapped. Therapeutic personnel work in settings such as schools, correctional facilities, health care institutions, or nursing homes. The subgroup has its own multi-level certification plan offered through the National Council for Therapeutic Recreation Certification. Therapeutic recreation personnel are also eligible for certification under the PRPS plan.

About fifteen colleges and universities in Pennsylvania offer a baccalaureate degree in recreation and parks. The only programs in Pennsylvania accredited by NRPA are at Penn State, Temple University, and Slippery Rock University, East Stroudsburg University, and York College. Of the 700 recreation/parks programs nationwide, twenty-one are accredited by NRPA. Many programs offer activity leadership training, but do not provide instruction in administrative skills for middle and upper level managers. Although graduates of four-year programs are prepared to enter at the middle management level, they often assume activity leader roles that promise mobility. Penn State also offers advanced degree programs. Master's and doctoral degree recipients generally pursue positions in college teaching or research.

The major professional association in the recreation and parks field is NRPA with its Pennsylvania affiliate, PRPS. Both NRPA and PRPS have branches which are focused on specializations within the larger units. The therapeutic recreation professionals are drawn toward the national branch of NRPA called the National Therapeutic Recreation Society (NTRS) and the state branch of PRPS called the Pennsylvania Therapeutic Society. The public recreation and

park professionals contribute to NRPA through the American Park and Recreation Society and the state branch called the Community Park and Recreation Society. Another related professional association is the American Alliance of Health, Physical Education, Recreation, and Dance (AAHPERD) and its Pennsylvania affiliate, the Pennsylvania Alliance of Health, Physical Education, Recreation, and Dance (PAHPERD). The latter two associations are strongly oriented toward physical educators.

The current PRPS registration plan, like other state plans, meets NRPA guidelines. A registered Pennsylvania practitioner is automatically registered nationally. The same reciprocity does not exist between the NRPA and NTRS registration boards. A practitioner who is nationally registered as a therapeutic recreation specialist does not automatically qualify for other registration. There are about 200 PRPS registered persons in Pennsylvania. The total PRPS membership numbers about 1,400.

Professional registration is not required for employment in the recreation and parks field. Concerned recreation and parks professionals are working hard to raise the awareness of employers and the public of the importance of registration to ensure professional standards. Unregistered practitioners, especially those graduating from non-accredited educational programs, may damage the public image of a developing profession.

CLIMATE FOR CONTINUING EDUCATION

Most continuing education for recreation and parks personnel in Pennsylvania is provided by the various state and national professional associations. Annual conferences of PRPS always include an educational component. PRPS also sponsors one-day regional workshops throughout the state during a two-week period each year. Each workshop addresses a different content area such as grant writing, movement therapy, or medical documentation. The workshops are planned with all skill levels in mind. The national associations provide educational programming as well.

Regional workshops have been more successful in attracting recreation and parks personnel than have statewide programs. There is great interest on the part of the profession in cooperating with providers of continuing education to address unmet needs more systematically. The Penn State Department of Recreation and Parks conducted a statewide continuing education needs assessment to help in such planning. Information was collected from practitioners, faculty members, and professional associations. Penn State has developed and offered one-day workshops on the basis of needs identified through this survey.

Projects under consideration include energy audit procedures, safety institutes, and budgetary support measures. Vandalism control and visitor safety management are two topics which future Penn State workshops will address. Also, a correspondence study manual has been developed by Penn State faculty members; practitioners will receive four CEUs for completing the manual. There is interest in utilizing innovative technologies to reach practitioners who do not take advantage of traditional modes of instruction such as group meetings or written materials. Resource persons also note that there is a developing market among township and borough solicitors for programs on safety management.

NRPA has cooperated with continuing education divisions at schools such as Indiana University, North Carolina State University, University of Georgia, and University of Colorado to provide programming for recreation and parks personnel. However, Pennsylvania schools have not been very active in this area.

Upper-level public parks commissioners report a need for training in the management of a revenue-producing operation, budgeting, grant-writing, program evaluation, marketing, and public relations. Business skills are becoming a necessity today. Topics of interest to activity leaders and coordinators include leadership and interpersonal skills, working with special populations such as the elderly, low-cost programming, and volunteer training, especially for youth sports leaders and officiators.

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REHABILITATION COUNSELING

There is no mandatory certification or licensure of rehabilitation counselors in Pennsylvania. However, voluntary national certification is provided by the Commission on Rehabilitation Counselor Certification (CRCC).

CERTIFICATION INFORMATION

In order to become a Certified Rehabilitation Counselor (C.R.C.), an individual must:

- I. Meet ONE of the following options:
 - A. Have a master's degree in rehabilitation counseling from a Council on Rehabilitation Education (CORE) accredited rehabilitation counseling education program; or
 - B. Have a master's degree in rehabilitation counseling from a rehabilitation counseling training program with a supervised internship, plus one year of acceptable experience under the supervision of a C.R.C.; or
 - C. Have a master's degree in rehabilitation counseling or a related area without a supervised internship plus two years of acceptable experience, at least one year of which must have been under the supervision of a C.R.C.; or
 - D. Have a master's degree in an unrelated area plus five years of acceptable experience, at least one year of which must have been under the supervision of a C.R.C.; or
 - E. Have a baccalaureate degree in an area plus five years of acceptable experience, at least one of which must have been under the supervision of a C.R.C.
- II. Pay an application fee.
- III. Pay an examination and certification fee.
- IV. Successfully pass the certification examination. This examination is a written, multiple choice test of 300 questions. It is given nationally twice a year, in April and October, and the test sites chosen are based on the geographical distribution of the test takers. If the examination is failed the first time, a retake is allowed within fifteen months with the payment of a fee. If it is failed a second time, then the applicant must go through the certification eligibility process again.

Provisional certification will be given to an individual who passes the examination and meets the education and general experience requirement, but lacks experience under the supervision of a C.R.C. However, he/she will be required to fulfill the one year of supervised experience before being granted full certification status.

RECERTIFICATION INFORMATION

Initial certification is valid for five years. In order to renew or maintain certification, an individual must:

- I. Provide evidence of participation in 150 clock hours of CORE-approved continuing education over the past five years.
- II. Pay a fee.

BACKGROUND INFORMATION

Rehabilitation counselors are employed in a variety of institutions and agencies. The majority work in civil service agencies; in Pennsylvania, the Bureau of Vocational Rehabilitation is the largest state employer of rehabilitation counselors. Rehabilitation counselors may also work in mental health agencies and clinics, in the area of law enforcement and corrections, in private agencies, allied health services, and community agencies. An increasing number of graduates are employed by private-for-profit companies serving the industrially injured.

The national certification, new in 1974, is rapidly becoming recognized as a criterion for employment in many of the above agencies and institutions. Counselor certification is required by federal regulations for intermediate health care facilities, and a number of agencies include it as a criterion for hiring and promotion. Legislation has been introduced in the United States Congress to amend the Rehabilitation Act to include the professional standards of certification.

Rehabilitation counselor educators are also affected by this national certification as it is a requirement for faculty to meet in helping to obtain and maintain accreditation of academic programs in rehabilitation counseling.

There are several national professional associations in the field of rehabilitation counseling, including the National Rehabilitation Association, the National Rehabilitation Counselor Association, and the American Association for Counseling and Development together with its subdivision, the American Rehabilitation Counseling Association.

Three schools in Pennsylvania have CORE accredited programs in rehabilitation counseling. They are The Pennsylvania State University, University of Pittsburgh, and University of Scranton. There are approximately 335 C.R.C.s in Pennsylvania.

CLIMATE FOR CONTINUING EDUCATION

As acceptance of CORE certification continues to grow, continuing education programs will be increasingly necessary to enable individuals to maintain certification. (The first group of individuals to be certified became eligible for recertification in August, 1979.) The professional associations offer some preconference workshops in conjunction with their national conferences, but little continuing education is provided at the state and local levels. Also, a course to prepare those sitting for the certification examination has been suggested as potentially useful, but apparently there is none available in Pennsylvania.

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RESPIRATORY THERAPY

Pennsylvania has no mandatory licensure, certification, or registration of respiratory therapists. However, there is credentialing by the National Board for Respiratory Therapy on a nationwide basis.

CREDENTIALING INFORMATION

There are two levels of credentialing, certified therapy technicians and registered therapists. To be credentialed, an individual must:

- I. Meet the appropriate education or experience requirements.
 - A. To become a certified respiratory therapy technician, an individual must complete a one-year approved educational program beyond high school.
 - B. To become a registered respiratory therapist, an individual must meet ONE of the following requirements:
 1. Complete an approved program to earn an associate degree in science or a baccalaureate degree in respiratory therapy, or
 2. Complete an associate or baccalaureate degree in a science-related field, and an intensive training program in respiratory therapy, or
 3. Have five years of experience as a certified respiratory therapist and complete thirty college credits.
- II. Have one year of experience working at the appropriate level.
- III. Pay an examination fee.
- IV. Pass the appropriate examination, which is administered by Educational Testing Service.
 - A. The certification examination is three hours in length.
 - B. The registration examination has two parts. The first part is similar to the certification examination, and must be passed before taking the second part, which is a clinical simulation.

RECREREDENTIALING INFORMATION

To maintain credentialing, an individual must:

- I. Be actively engaged in the practice of respiratory therapy.
- II. Pay an annual fee.

Continuing education requirements: none.

BACKGROUND INFORMATION

There are approximately 14,000 registered respiratory technicians and 16,000 certified respiratory therapists in the United States, and twice that many individuals practicing respiratory therapy. In Pennsylvania approximately 1,200 people practice respiratory therapy.

Respiratory therapy is a relatively new allied health field. It originated in the late 1950s, when twelve months of on-the-job training under a supervisor constituted a training program. In 1970, completion of an eighteen-month educational program became the requirement for registration. Currently about 300 schools in the country offer programs approved by the Joint Review Committee for Respiratory Therapy Education. The demand for respiratory therapists far exceeds the supply of credentialed professionals; hence many individuals who are not credentialed are hired to work as respiratory therapists.

State licensure of respiratory therapists is frequently discussed, as are certification and registration. State registration of respiratory therapists based upon the existing credentialing standards is viewed by some as a desirable form of regulation for Pennsylvania. Without any such regulation, determining third party payment is a problem. Only one state, Arkansas, licenses respiratory therapists at this time.

The American Association for Respiratory Therapy (AART) is the national professional organization, and it has a state society and seven district chapters in the Commonwealth.

Some changes are expected to take place regarding the credentialing and practice of respiratory therapists. A baccalaureate degree may be required for credentialing in the future. State regulation of some type may be prompted by third party payers, if not by the profession itself. Continuing education may be required to maintain credentials, being tied in to the yearly renewal.

CLIMATE FOR CONTINUING EDUCATION

Since at least 50 percent of those practicing respiratory therapy have had no formal education in the field, continuing education is considered important for them. Changes in the field also make continuing education desirable for all practitioners, regardless of their initial training. AART has recently developed a system called PROCEED to approve programs for continuing education unit credit and to maintain an enrollee's continuing education transcript. This procedure is somewhat complex, but will become important if continuing education is mandated for recertification. It has been suggested that Penn State could serve respiratory therapists by establishing a working relationship with AART and understanding and implementing the provisions of PROCEED.

AART provides some continuing education for its members, and several colleges in the state also offer programs. However, the need for continuing education is increasing.

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SANITARIANS

Pennsylvania has no mandatory certification or licensure of sanitarians. However, voluntary registration is provided through the Board for Registration of Sanitarians in Pennsylvania. The National Environmental Health Association (NEHA) provides national registration.

REGISTRATION INFORMATION

In order to become a Registered Sanitarian (R.S.) in Pennsylvania, an individual must:

- I. Possess a baccalaureate degree from an accredited college or university, including forty-five quarter hours or thirty semester hours in the basic natural sciences.
- II. Have a minimum of two years of experience as a full time sanitarian. Graduate degrees may be substituted for one year of this experience.
- III. Successfully complete the Sanitarian's Registration Examination.
- IV. Pay an application fee and an examination fee.

The NEHA registration plan is similar, but eliminates the experience requirement if the individual's undergraduate degree is in environmental health.

REREGISTRATION INFORMATION

Registration renewal is biennial; a fee is charged.

Continuing education requirements: none.

BACKGROUND INFORMATION

Sanitarians, who also may be called environmentalists, are persons specializing in environmental health. Their work involves the protection of human food, air, water, and shelter. Most sanitarians are employed in the public sector, but others work for private engineering firms or food service industries.

In Pennsylvania, sanitarians have a variety of occupational titles, since they are employed primarily by a variety of governmental agencies which each use different position titles. At the state level, positions are filled through the civil service system. The Department of Environmental Resources employs sanitarians and supervising sanitarians. Public health executives for the Department of Health and food inspectors within the Department of Agriculture may have environmental health backgrounds.

At the local level, positions are governed through state laws regulated by the Department of Health. Depending on the local government unit, sanitarians also may be called supervising sanitarians or health officers, but their responsibilities are similar. They are involved in the plan review, investigation, and inspection of the following environmental programs: food

service sanitation, rodent and insect control, sewage and waste water disposal, well and private water supply, noise control, solid and hazardous waste control, public bathing places, recreational campgrounds, school sanitation, air pollution control, and housing. Employment qualifications at both the state and local levels vary with each employing agency. Generally, however, an individual must have a bachelor's degree to be employed at a level higher than that of a technician.

NEHA accredits academic programs in environmental health, but currently no Pennsylvania programs are accredited. Schools which have coursework in environmental or public health include West Chester University, Temple University, Drexel University, and University of Pittsburgh. Penn State offers environmental protection and food science programs. Although a person may become an environmental technician without a college diploma, a baccalaureate degree in environmental health or a related science is necessary for state or national registration, or for employment in many government agencies.

Over thirty states require sanitarians to be registered, but Pennsylvania does not. However, in lieu of mandatory registration, the Board for Registration of Sanitarians in Pennsylvania offers a voluntary registration program. Because Pennsylvania's registration requirements correspond to those at the national level and the examinations are identical, NEHA will register sanitarians on the basis of their Pennsylvania registration. About half of the sanitarians currently working in the state are estimated to be registered. Mandatory registration or licensure of sanitarians in Pennsylvania has been proposed but never enacted, and appears unlikely at this time.

NEHA is the largest professional association serving only environmentalists; its state affiliate, Pennsylvania Environmental Health Association (PEHA) meets annually. The American Public Health Association (APHA) has an environmental health section and the associated state organization is the Pennsylvania Public Health Association (PPHA). The Central Atlantic States Association of Food and Drug Officials (CASA) is a strong regional organization which relates to those involved in the food service sanitation field. The American Academy of Sanitarians meets in conjunction with NEHA, and has more stringent membership requirements, thus appealing more to administrators in the field. Two other organizations are the International Association of Milk, Food, and Environmental Sanitarians, Inc. (IAMFES), geared to food processing and service, and the Environmental Management Association.

CLIMATE FOR CONTINUING EDUCATION

The limited continuing education available is not coordinated or publicized extensively. A few providers include government agencies, such as the Food and Drug Administration, Pennsylvania Department of Health, and the Public Health Service, and professional associations, such as CASA and Pennsylvania Food and Drug Association. PEHA has one or two meetings per year, and NEHA's annual conference has an educational component. APHA offers publications and other written materials, as does IAMFES. West Chester University also has offered some continuing education recently.

Cost, travel time, and interest are the primary deterrents to continuing education participation. Because many sanitarians are employed by government agencies, they are dependent on travel budgets and time allowances to attend

workshops and meetings. However, budget costs have limited such travel severely, and without agency support, sanitarians are unlikely to attend such programs. Continuing education attendance is not required for reregistration, and unless they are convinced of a potential benefit for them, many sanitarians are not motivated to participate. If there were interest in continuing education, sanitarians' needs might be met best through low cost, evening workshops in accessible locations, or through some alternative delivery system.

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SECRETARIAL PRACTICE
CERTIFIED PROFESSIONAL SECRETARIES

There is no mandatory licensure or certification of secretaries in Pennsylvania. However, voluntary national certification for professional secretaries exists through the Institute for Certifying Secretaries, a department of Professional Secretaries International (PSI).

CERTIFICATION INFORMATION

In order to become a Certified Professional Secretary (CPS), an individual must:

I. Meet ONE of these options:

- A. Have a high school diploma or its equivalent, plus six years of verified secretarial experience, or
- B. Have one year of postsecondary education equaling thirty credit hours, plus five years of verified secretarial experience, or
- C. Have two years of postsecondary education equaling sixty credit hours, plus four years of verified secretarial experience, or
- D. Have three years of postsecondary education equaling ninety credit hours, plus three years of verified secretarial experience, or
- E. Have four or more years of postsecondary education equaling a minimum of 120 credit hours, plus two years of verified secretarial experience.

A full time employed secretary or college/university student may take the CPS examination prior to meeting the requirements; however, all educational and satisfactory secretarial experience must be obtained before certification is granted.

II. Pay a processing fee.

III. Pay an examination fee and a fee for each part retaken.

IV. Pass the CPS examination. This is a two-day examination which covers six broad areas: behavioral science in business, business law, economics and management, accounting, office administration and communication, and office technology. All six parts must be passed for certification. If certain parts are not passed on the first attempt, they may be taken within the next five years, but at least one portion must be passed initially. The examination is given in May each year at various examination centers. Approved candidates are not required to start the examination the year approved; a five-year period is allowed. If the candidate does not start the examination within the five-year period, a new application must be submitted.

RECERTIFICATION INFORMATION

There are currently no provisions for recertification.

BACKGROUND INFORMATION

There are over three million persons in the United States employed in various secretarial fields. PSI, the major professional association serving their needs, was called the National Secretaries Association (NSA) until 1981.

The CPS designation was instituted in 1951 by PSI (then NSA) to recognize a high level of competence in the secretarial field. This designation offers a goal for the career-oriented secretary who wants to be identified as exceptional and it establishes an accepted professional standard. The CPS can expect a higher salary and is qualified to hold a supervisory office position. The CPS is also seen as a means to upgrade the secretarial field. There are over 15,000 CPSs in the nation, of which over 250 are in Pennsylvania. The number of CPSs is steadily increasing, nearly doubling since 1972. Currently 248 colleges in the United States and Canada will grant college credit for the CPS rating. The American Council on Education recommends that thirty-two semester hours be granted for the CPS rating.

CLIMATE FOR CONTINUING EDUCATION

The Institute for Certifying Secretaries does not provide any type of educational courses of preparation for the examination. It does, however, offer a bibliography of recommended books that an individual may want to read for self study. Recently John Wiley and Sons published six modules on CPS review courses. A CPS review instructor's resource manual also is available. Some colleges and universities, as well as private business schools, offer programs or courses of preparation for the CPS examination. For example, a series of courses have just been developed through the Independent Study Division of Indiana University School of Continuing Studies. The series consists of a combination of credit and noncredit courses which may be applied to the External Degree Program for credit towards an associate or baccalaureate degree in general studies if the individual passes the CPS exam. Penn State has initiated a professional development program for secretaries which includes six noncredit courses and can be taken as preparation for the CPS exam. A certificate is awarded to individuals who complete the course sequence. Harrisburg Area Community College also offers CPS study courses.

Once CPS certification is granted, an individual is expected to keep updated. There is a great emphasis upon continued self learning. PSI recently approved a proposal to conduct a study of CPSs on "Factors Influencing Professional Secretaries in Continuing Professional Education." This survey will be used to help PSI plan programs for continuing professional education. Local PSI chapters offer educational programs and sponsor seminars for their membership, and the Institute for Certifying Secretaries has provided annual seminars on such topics as interpersonal communications, the secretary in the management process, oral communications, and career growth. Continuing education workshops have also been sponsored by Penn State, particularly through the Commonwealth campuses.

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SECRETARIAL PRACTICE LEGAL SECRETARIES

There is no mandatory licensure or certification of legal secretaries. However, voluntary national certification is provided by the National Association of Legal Secretaries (NALS).

CERTIFICATION INFORMATION

The NALS offers a certification program for Professional Legal Secretaries (P.L.S.). This certification is an aid to the standardization and professionalization of the field.

To be certified as a P.L.S., an individual must:

- I. Have five years' experience in a legal setting. A partial waiver of the five-year legal secretarial experience requirement may be granted if the applicant has a baccalaureate or associate degree.
- II. Successfully complete an examination. The examination is a written, two day test covering written communication skills and knowledge; human relations and ethics; legal secretarial procedures; legal secretarial accounting; legal terminology, techniques and procedures; exercise of judgment; and legal secretarial skills.

An examination is given on the last Friday and Saturday in March and October at permanent testing centers throughout the country. A fee is charged.

Within three years of the initial examination, the applicant may retake the part or parts failed. If the applicant passed at least two parts on the initial examination, the applicant need only retake the failed parts. If two parts were not passed, the applicant must retake the entire examination. If the applicant does not pass all parts after retaking them four times within said three-year period, the entire examination must be retaken.

RECERTIFICATION INFORMATION

There is no recertification of P.L.S.s. Certification is good for life.

BACKGROUND INFORMATION

Legal secretaries can be employed either by attorneys or in a variety of other types of offices. For example, their legal knowledge and secretarial skills aid them in contract, government, real estate, and parole offices.

A legal secretary with more specialized training can become a legal assistant. A legal assistant is qualified to research legal documents and help write reports and briefings.

Legal secretaries generally receive their training in a formal diploma, certificate, or associate degree program at a business school or community

college. If an individual works in a large law office, he or she usually receives additional on-the-job training. Experience is an important factor in being recognized as a legal secretary.

Most law offices now have word processing equipment which is operated by a legal secretary. Automated typing skills should be sought by the legal secretary either through formal schooling or through specialized workshops. The job also may require that the legal secretary become a notary public.

There are few P.L.S.s in Pennsylvania. The P.L.S. designation is relatively new and has not been given as much publicity as other certification opportunities in the secretarial field.

Job placement for legal secretaries of any age is very good. There is constant demand and jobs are obtainable on a part- or full-time basis. Opportunities for promotion and advancement vary with the size of the law firm or the kind of business for which the individual works, but many experienced legal secretaries have become officers of corporations or courts, court reporters, legal assistants, or lawyers, with the appropriate training.

CLIMATE FOR CONTINUING EDUCATION

NALS, through its state and local chapters, sponsors legal education classes, seminars, and professional courses. A study guide and suggested bibliography for self study is published by NALS for certification examination preparation.

In addition to continuing education focused on the legal knowledge of legal secretaries, general secretarial continuing education is important to this field. Relevant programs are offered by Professional Secretaries International and the American Management Association.

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SECRETARIAL PRACTICE MEDICAL ASSISTANTS

There is no mandatory certification or licensure of medical assistants. However, voluntary national certification for medical assistants is provided by the American Association of Medical Assistants (AAMA). This report grew out of an investigation of the medical secretarial field in which there is no certification or licensure. However, the medical secretary, when he or she takes expanded duties, is classified as a medical assistant.

CERTIFICATION INFORMATION

In the past, AAMA provided four certification categories for medical assistants. One is the general Certified Medical Assistant (CMA), and three were specialty certifications. At present the specialty certifications have been suspended.

To be certified as a CMA, an individual must:

- I. Meet ONE of the following options:
 - A. Have an associate degree or certificate in medical assisting from an AAMA-accredited program; or
 - B. Have one year of full-time experience under the supervision of a physician and a high school diploma or its equivalent; or
 - C. Have five years full-time experience under the supervision of a physician.
- II. Pay an application fee.
- III. Pay an examination fee.
- IV. Pass an examination. The examination is written and covers three broad areas: general (medical terminology, basic anatomy, psychology, and law and economics); administrative procedures (oral and written communications, bookkeeping, office equipment, and insurance); and clinical procedures (examining room procedures, medications and injections, and storage and supplies). The examination is written and is offered twice a year at test centers throughout the United States.

RECERTIFICATION INFORMATION

A voluntary revalidation program for CMAs was implemented in 1980 by AAMA. This program provides for revalidation of certification on a five-year, periodic basis by completing one of two options: revalidation by examination or revalidation by a continuing education point method. Examinations are offered for the CMA. A continuing education point system based on varying points for college credit and CEUs (one AAMA CEU = ten points; one college

semester hour = eighteen points), is defined for each category of certification. The number of required points range from fifty to 110.

BACKGROUND INFORMATION

The medical assistant is trained in office skills as they relate to a medical office, whether for the private physician in practice, a group of physicians, or a clinic setting. The medical assistant may be employed by a physician in a hospital if he/she is under the direct supervision of the physician and is not employed by the hospital. He or she may have the responsibilities of receptionist, bookkeeper, and office manager. In addition, the individual may prepare patients for the physician and do basic laboratory procedures such as tests for urinalysis, blood counts, and basic blood chemistry.

In Pennsylvania, several business schools and community colleges offer programs for medical assistants. These are generally two-year programs leading to a diploma, certificate, or associate degree. Job placement is not a problem for graduates of medical assistant programs.

Six schools are approved by the AAMA to meet eligibility requirements for certification. They are the Community College of Allegheny County (Allegheny campus); Median School, Pittsburgh; Central Pennsylvania Business School, Summerdale; ICM School of Business, Pittsburgh; Gannon University, Erie; and the Community College of Philadelphia.

Although specialized training as a medical assistant may be preferred by employers, it is not necessary. Many individuals may come to the position with a general secretarial background and learn the technical knowledge of the job.

CLIMATE FOR CONTINUING EDUCATION

There are over 500 members of the Pennsylvania Society, AAMA, less than half of whom are certified. Members are encouraged to work toward a continuing education merit award which requires 150 hours of continuing education every three years. The majority of medical assistants are not members of AAMA or its state chapters. Membership in AAMA is open to anyone working under the supervision of a physician including nurses and laboratory technicians, but the majority of members are medical secretaries.

Continuing education is offered by AAMA at the national, state and local levels. All programs offer continuing education credit. The main purpose of the local and state chapters is to offer continuing education. The continuing education is developed and sponsored primarily through AAMA and its affiliates, rather than through colleges or schools of business. However, some cosponsoring of programs has occurred between the American Medical Association and Professional Secretaries International.

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SECURITIES SALES
(Registered Representatives)

Persons involved in securities sales or exchange in Pennsylvania must be licensed by the Pennsylvania Securities and Exchange Commission (PSEC). In most cases they also will be registered with the National Association of Securities Dealers (NASD) and if employed by members of the New York Stock Exchange (NYSE) they will be registered by the Exchange.

LICENSING INFORMATION

To be licensed by PSEC, an individual must:

- I. Successfully complete the PSEC examination and the appropriate national licensing examination(s).
- II. Pay a fee for each examination taken.

To be registered with NASD, an individual must:

- I. Successfully complete either the General Securities Registered Representative Examination (Series 7) or the appropriate NASD limited registration examination. There are both general and topical examinations at the limited (entry) and principal (managerial) levels.

To be registered with NYSE, an individual must:

- I. Be employed for at least four months by a member organization.
- II. Successfully complete the General Securities Registered Representative Examination (Series 7) under the sponsorship of a member organization.

To be permitted to accept orders from an individual in another state, a Registered Representative must be licensed in that state. Most states recognize and accept the joint industry Series 7 General Securities Registered Representative Examination, but many also require an examination covering the laws of their own state.

In addition, Registered Representatives wishing to sell life insurance or variable annuities must obtain separate state insurance licenses.

RELICENSING INFORMATION

To maintain NASD registration, the Registered Representative must pay a standard biennial fee regardless of the levels and types of examinations taken.

To maintain registration in some states, it is necessary to reapply and pay a fee from time to time. Retesting is not required.

Continuing education requirements: none.

BACKGROUND INFORMATION

The continually expanding product line handled by Registered Representatives may include stocks, bonds, options, mutual funds, insurance, annuities, and tax shelters of various types and commodities. Registered Representatives who handle commodities must pass the National Commodities Examination. Registered Representatives also may assist with financial planning for a client. They may serve all types of customers or specialize in one type of investor. They also may specialize in certain kinds of securities such as mutual funds. Entry level representatives' efforts are focused on developing a clientele and then servicing their accounts. While large numbers of Registered Representatives are employees of the few major firms clustered in large metropolitan areas, opportunities exist in all parts of the country, both in local offices of major firms and in offices of regional or local firms.

PSEC licensure is necessary for a Registered Representative to accept and place orders from Pennsylvania residents. The NYSE is the compiler of the Series 7 General Securities Registered Representatives Examination in cooperation with other securities exchanges, the Municipal Securities Rulemaking Board (MSRB), and the NASD which administers the examination program. Series 7 is recognized by all securities exchanges, the MSRB, and the NASD. NASD registration allows the representative to accept and place orders for over-the-counter securities as well as mutual funds. NYSE is the largest and most prestigious marketplace for listed securities.

The major trade association is the Securities Industry Association (SIA) which is composed of firms representing about 95 percent of the securities business in North America. SIA provides research, lobbying, and educational services to its members and along with exchanges promotes high ethical standards.

CLIMATE FOR CONTINUING EDUCATION

The securities industry is beginning to intensify continuing education among Registered Representatives. SIA is one active provider of management-level training. Since 1953 SIA, in conjunction with the Wharton School of the University of Pennsylvania, has held the Securities Industries Institute (SII), a one-week per year, three-year certificate program for mid-level sales and branch managers. Coursework includes economics, finance, accounting, marketing, sales management, and human resources. The SII certificate is widely recognized in the field. SIA also sponsors regular seminars on subjects of general interest such as branch management, sales and marketing, personnel development, operations, and legal compliance. These seminars are scheduled several times per year in different urban areas.

Member firm training departments and a number of independent training entities prepare candidates for registration and train practitioners in many facets of the securities industry. A list of training programs and training schools appears in the General Securities Registered Representatives Examination Study Outline. The Testing section of NYSE consults regularly with both training directors of member firms and independent training entities on the impact of changes and developments in the securities industry on training and the Exchange's examination program.

The large investment firms are the major providers of continuing education for their own employees. Merrill Lynch, Pierce, Fenner, and Smith, for

example, is presently expanding its in-house professional development program. This may lead to internal certification and eventually to industry-wide certification. The training program for new employees includes textbooks, cassettes, and videotape presentations. Even though smaller firms may not have similar resources to design the highest level sophisticated packages, most provide continuing education for their staffs. Many firms now are providing training in overall financial planning.

Registered Representatives who work for firms with research departments benefit from the work of financial analysts who keep them abreast of general economic conditions and the latest developments in specific industries and companies.

In-house training in prospecting, sales skills, accounting, computer technology, and innovative investment vehicles such as interest rate futures is always needed. Rapid changes in product-mix and tax laws make continuous learning a necessity.

Potential providers of continuing education for Registered Representatives should recognize the cyclical nature of the securities business and the effect that it has on representatives' attitudes toward training. Registered Representatives would have to feel strongly convinced of the merit of a program before making a commitment to attend. perhaps an evening or weekend workshop or an innovative delivery mode such as public television or programmed learning would be preferable to traditional programming, particularly for those in more rural locations.

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SOCIAL WORK

Pennsylvania has no mandatory licensure of social workers at this time. However, licensing efforts are currently underway, and both state and national officials of the National Association of Social Workers (NASW) describe licensure as a major issue and effort. There are those, however, who believe that licensure of social workers in Pennsylvania has little chance of passage in the foreseeable future.

BACKGROUND INFORMATION

In the past, social workers avoided the issue of licensure, stating that they didn't want to be controlled by others. However, in recent years several factors have caused practitioners nationwide to take a new look at the need for licensing. Within the last five years, the number of states licensing social workers has doubled; as of April, 1984, thirty-three states were regulating social workers. In Pennsylvania, as well as elsewhere in the nation, this move toward licensing has grown out of the following considerations:

- I. The need for quality control. Many people providing social services have no formal training in social work and the quality of their work may be poor, which has a negative impact on the public opinion of social workers.
- II. The need to identify individuals and agencies for third party reimbursement. With many social workers and social work agencies providing reimbursable mental health care services, insurance companies need a legal standard regarding whom to pay.
- III. The need to combat the tendency of social work agencies to have low or no requirements for personnel. The theory that both public and private agencies would maintain quality of service by hiring only trained, qualified personnel has proven false. Maintenance of quality service is reported to be a greater problem with public agencies than with those that are private. However, licensure of social workers would not guarantee that such agencies would change their employment requirements.
- IV. The need for visibility and acceptance as a profession. Society relies on licensing as an indicator of credibility for professionals, and the social workers feel that their profession gains in status as licensing occurs.

The standards of practice for bills that have been and are being submitted for licensing in various states have been developed in cooperation with NASW. These standards include requirements for continued learning, because the national organization feels it is particularly critical that continuing education be in the introductory legislation. As licensing becomes a requirement in the various states, many practitioners who have no formal education or training in social work are licensed under a "grandfather" clause. These people need some formal training, not only to keep them up-to-date but to give them a structured exposure to the concepts behind the practice of social work.

There are two licensing bills currently before the Pennsylvania Legislature. One covers both master's and baccalaureate degree holders from

accredited social work programs. A second bill provides licensure for those who hold a master's in social work (MSW).

There are some designations that help to fill the gap for Pennsylvania and other states having neither title nor practice legislation for social workers. The Academy of Certified Social Workers (ACSW), operated through NASW, accepts as members individuals who have at least a master's degree in social work, have had supervised work experience, and have passed an examination. Membership in ACSW increases employment opportunities, and assures the employer or client that an individual has training, experience, and some mastery of his/her profession. Another designation is found in the NASW Register of Clinical Social Workers, a listing that includes practicing social workers with at least a master's degree and five years of professional experience.

Penn State offers an accredited Bachelor of Arts degree in social welfare.

CLIMATE FOR CONTINUING EDUCATION

Continuing education has always been a strong force in social work. The nature of the profession, which enables practitioners to benefit from discussing their cases and sharing experiences and opinions, has no doubt contributed to interest in continuing education participation. A substantial knowledge proliferation within the field has given substance to continuing education programs held throughout the state.

Resource persons suggest that there is a need for continuing education programs to combine the learning experiences related to the helping, caring process with the skills needed to be analytical, organized, and attuned to objectives.

Penn State has been involved in continuing education for professional social workers by offering specialized courses in rural social work practice and in law and social work. Social welfare faculty members also have worked with public and private agencies to provide continuing education.

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SURVEYING

Professional land surveyors are licensed in Pennsylvania by the State Registration Board for Professional Engineers under the 1979 amendment to the Professional Engineers Registration Law. It is unlawful for any person to practice land surveying in the Commonwealth unless he/she is licensed and registered as a professional land surveyor.

LICENSING INFORMATION

To be licensed as a professional land surveyor, an individual must:

- I. Be twenty-one years of age, of good character, and able to speak and write the English language.
- II. Meet ONE of the following options:

A. Option I

1. Meet ONE of the educational requirements described below:
 - a. Be a graduate of a four year approved course in civil engineering or surveying from an approved institution, having at least ten credit hours of surveying, or
 - b. Be a graduate of an approved two year course in surveying and related areas of engineering design leading to an associate degree in surveying.
2. Meet ONE of the experience requirements described below:
 - a. If licensing occurs before 1983, have two or more years' progressive experience, or
 - b. If licensing occurs in 1983 or after, have four or more years' progressive experience.

This experience is to be in land surveying under the supervision of a professional land surveyor, or a similarly qualified surveyor.

B. Option II: Meet ONE of the requirements described below:

1. If licensing occurs before 1985, have six or more years' progressive experience, or
2. If licensing occurs in 1985 or thereafter, have ten or more years' progressive experience.

This experience is to be in land surveying. Half of the time is to be spent in reasonable charge of primary land surveying functions, under the supervision of a professional land surveyor or a similarly qualified surveyor.

III. Pay an application fee.

IV. Successfully pass three written examinations prescribed by the Board, including an eight-hour National Examination in Fundamentals, a four-hour National Examination on Practice, and a four-hour State of Pennsylvania Practice Examination.

An individual licensed in another state or foreign country having requirements at least equal to those in Pennsylvania may be licensed providing he/she passes the state Practice Examination.

The Board maintains a roster of all professional land surveyors licensed by the state and registered with the Board.

RELICENSING INFORMATION

Professional land surveyors must register biennially with the Board by payment of a fee.

Continuing education requirements: none.

BACKGROUND INFORMATION

The basics of surveying have changed over the years, but recent years have brought about even more changes in the rules governing the practice of land surveying in Pennsylvania. These changes have focused primarily on a tightening of the regulations to insure that those individuals licensed as land surveyors are in fact qualified by reason of education and/or experience.

Under previously existing legislation, an individual who has a baccalaureate degree in any engineering discipline and two years of surveying experience could become a licensed surveyor without examination. Thus persons licensed under these regulations were not required to have had any surveying courses.

While an individual must be licensed to work independently as a land surveyor, he/she need not be licensed to work under a licensed surveyor. Currently there are approximately 3,000 surveyors licensed in Pennsylvania.

The American Congress on Surveying and Mapping (ACSM) is the national professional organization for surveyors, and the Pennsylvania Society of Land Surveyors (PSLS) is a state affiliate of that organization. PSLS has fourteen local sections throughout the state which have technical meetings for their membership throughout the year. The national organization has annual conferences with an educational component.

CLIMATE FOR CONTINUING EDUCATION

Because of the recently passed legislation with its more stringent educational requirements for licensure, there are increased demands for surveying courses. Not only will resident instruction programs have to be modified to allow students to meet the requirement of ten course hours of surveying, but continuing education courses in surveying are desirable for those with engineering or other degrees who wish to become licensed land surveyors.

In the past, Penn State has offered a review course for the licensing examination. Currently PSLS is the main organizer of such a course in Pennsylvania.

Penn State sponsors an annual conference for surveyors each January, in cooperation with PSLS. ACSM and the University also offer workshops throughout the year.

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TRANSPORTATION AND LOGISTICS

There is no state licensure or certification for persons wishing to enter the field of logistics. However, four types of voluntary national certification exist: the Association of Transportation Practitioners designation, Certified Membership of the American Society of Transportation and Logistics, the Certified Purchasing Manager designation available through the National Association of Purchasing Management, and the Certified Practitioner and Certified Fellow designations offered by the American Production and Inventory Control Society.

BACKGROUND INFORMATION

The field of logistics is very broad and includes the areas of transportation, warehousing, packaging, procurement and purchasing, inventory control, and order processing. All of these areas are found in the industrial sector, transportation companies, the military, and government.

Although there is no licensure in the field, some sectors of the field are introducing certification. Two of the existing certifications are in the transportation sector, one is in purchasing, and the fourth is in inventory control.

The first type of certification is for the designation "Interstate Commerce Commission Practitioner." The ICC Practitioner may function as a legal counselor, representing a company in cases that come before either the federal or state regulatory agencies.

There are two options for fulfilling the ICC Practitioner's requirements:

- I. A practicing lawyer who is a member of a bar needs only to sign a registry. This person is called a Paragraph A Practitioner.
- II. For a layman to join the bar of the ICC, thus becoming a Paragraph B Practitioner, he/she must:

A. Meet ONE of the following options:

1. Option 1: Complete a minimum of two years of postsecondary education, and possess technical knowledge, training or experience in the field of transportation which is regarded by the Commission as the equivalent of two additional years of college education.
2. Option 2: Have a minimum of ten years in the transportation field.
3. Option 3: Hold a bachelor's degree with at least twelve semester hours or eighteen quarter hours in transportation or business.

4. Option 4: Hold a bachelor's degree and have a minimum of one year of experience in the transportation field.
- B. Submit an application for evaluation and pay a fee.
- C. Pass a written examination. This day-long examination is national and is developed and administered by the Interstate Commerce Commission. It is given the second Tuesday of July and February in Philadelphia and Pittsburgh, and a fee is charged.

Upon passing the examination, an individual is permanently registered as an ICC Practitioner.

Nationwide, there are approximately 8,000 to 10,000 ICC Practitioners, about 4,500 of whom are members of the Association of Transportation Practitioners, their professional association headquartered in Washington, D. C. Approximately one half of the ICC Practitioners have Paragraph B status. Of the Paragraph B practitioners, only about 200 actually represent clients before an agency. Most Paragraph B practitioners use the designation to assist their employing firm or as a springboard for employment; the designation is often required for a job and usually commands a larger starting salary.

Another certification in the field of logistics is the Certified in Transportation and Logistics designation (CTL) of the American Society of Transportation and Logistics (AST&L). This professional association was developed to establish standards of education, experience, and ethics among individuals in traffic and transportation.

To earn the CTL designation, an individual must:

- I. Be at least 21 years of age.
- II. Have completed two years or be currently enrolled in an accredited college or university. Five years of increasingly responsible work experience may be substituted.
- III. Complete four examinations by test or waiver. The examinations are in four areas: transportation economics, traffic management, general management, and a choice of either transportation law or logistics. The first three examinations may be waived if an individual has completed two or more years of course work at an accredited college or recognized vocational school within the past ten years with a grade of "C" or better in specific courses in each topic area. The fourth examination can be waived if the individual has satisfactorily completed the ICC examination within the past ten years and/or has adequate proof of membership in the bar of the ICC. There is a fee for each examination, and each is given twice a year.
- IV. Write an original research paper. A fee is paid when an outline of the paper is submitted for AST&L approval.

There are no provisions for recertification.

The number of CTLs is increasing, as is recognition of the program. The federal government treats it almost as an equivalent to a baccalaureate degree and it appears that it is accepted in lieu of the education requirement for the ICC Practitioner application. Within the industry, there are a range of reactions to the CTL; some companies have never heard of it and others may require it of their employees.

The third certification program was implemented by the National Association of Purchasing Management (NAPM) in 1974. NAPM is the largest of the professional purchasing organizations and the only one which is devoted to all types of purchasing. It has about 30,000 members who belong through local associations. In Pennsylvania there are purchasing associations in Philadelphia, Lehigh Valley, Scranton/Wilkes Barre, Williamsport, Harrisburg/Lancaster/York, Reading, Pittsburgh, New Castle/Butler, Erie, and Bradford. Applicants for NAPM's Certified Purchasing Manager (C.P.M.) designation are evaluated on the basis of five years of experience in purchasing or materials management, or a degree from a recognized four-year college plus three years of related experience; successful completion of four examinations; years of experience; and contributions to the purchasing profession. Individuals earn points for specific accomplishments in each of these categories, and must accumulate a minimum total number of points to qualify for certification. Passing all the examinations is a requirement. The examinations cover four functions: purchasing, administration, organization, and continuing education. There are currently about 10,000 C.P.M.s nationwide.

The original C.P.M. designation is valid for five years, after which evidence of the ongoing interest in professional improvement must be submitted. This is accomplished by the accumulation of additional points from the educational and contributions sections of the C.P.M. program.

The American Production and Control Society (APICS) is geared primarily to entry level personnel handling inventory, production scheduling, and stores control functions. APICS offers certification at two levels, Certified Practitioner and Fellow, depending on the scores obtained on a series of five examinations. Certification is viewed as a very desirable designation for high school graduates seeking upward mobility in the industry. There are no provisions for recertification.

In Pennsylvania, Penn State is the major university or college offering a program in logistics. The Robert Morris College in Pittsburgh, an urban night school, also offers a program in transportation but it generally serves local students. Both the University of Pennsylvania and the University of Scranton offer courses in logistics. Nationally, Penn State, the University of Tennessee, and the University of Maryland are the major schools offering a logistics program.

CLIMATE FOR CONTINUING EDUCATION

Many of the current continuing education opportunities are provided by professional associations. Colleges and universities, including Penn State, also have addressed the professional development needs of practitioners. Penn

State's activity has been primarily in the traffic and transportation realm. Possibilities exist to expand programming in this area as well as in other business logistic specialties.

A limited amount of continuing education is available for those individuals preparing to take the ICC Practitioner certification examination. Nationally, about 200 individuals a year take the ICC Practitioner examination. There is currently a correspondence course available to prepare for it, but it is very outdated. The course of deregulation in transportation is making this designation less valuable in the field.

Preparatory materials for the CTL examinations exist through AST&L. The Association has developed study guides for several of the examinations and also offers an extensive reading list for each topical area. About half of the AST&L chapters offer review programs. The Association is also considering becoming involved in offering more continuing education.

NAPM offers a variety of seminars for persons with purchasing responsibilities. The Association also provides an independent study program and videocassette courses. Many of the local associations offer informal review courses for the C.P.M. examination. Penn State also has study outlines for the C.P.M. examinations; these outlines are available for use in developing formal or informal courses locally.

The National Council of Physical Distribution Management offers extensive continuing education through its annual conference and in local chapter meetings. A continuing education need has been identified in Pennsylvania in the area of distribution, particularly because there is a great change from year to year in many areas, including law and claims.

A certification examination review course for the APICS examination might be offered. Within this field, other possible topics of interest include materials requirement planning and inventory control for wholesaling and retailing establishments. It has been suggested that the APICS membership represents an excellent potential market. APICS publishes study guides for each certification examination. It also conducts workshops and offers training aids and other publications which could assist instructors in developing seminars or courses.

Delta Nu Alpha, an educational fraternity in the industry, has a national membership of about 10,000 with the majority working in the transportation and shipping field. This association is very interested in providing educational programs for its membership but needs some help in the delivery of these programs. There are several chapters in Pennsylvania including Pittsburgh, Erie, Harrisburg, Philadelphia, Lancaster, Allentown, Bethlehem, Easton, Hazleton, Reading, Williamsport, Scranton and a college chapter at Penn State. The state membership is about 1,500.

Some continuing education is offered in industry; General Electric, IBM, and the U.S. Government are the three largest providers of continuing education for employees. Continuing education programs offered through other companies are limited or nonexistent. Requests have come from industry to the professional associations and colleges and universities with logistics departments to provide continuing education, primarily for updating purposes.

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TRAVEL AGENTS

There is no licensure of travel agents in Pennsylvania. Voluntary certification of experienced travel agents is available through the Institute of Certified Travel Agents (ICTA).

CERTIFICATION INFORMATION

In order to become a Certified Travel Counselor (CTC), an individual must:

- I. Enroll in the ICTA Travel Management Program consisting of a core curriculum plus an approved independent study project. Core courses include business management, marketing, management of sales personnel, and tourism.
- II. Successfully complete four examinations and submit an independent travel paper.
- III. Have at least five years' full-time employment in the United States and/or Canada in one or a combination of the following:
 - a. executive, marketing/sales, or operating position in a travel agency duly recognized by industry/carrier conferences;
 - b. marketing/sales position with a carrier, hotel, or wholesaler of tours;
 - c. other travel-related executive position devoted to the marketing or training functions in travel related activities.
- IV. Pay a specified fee for the above academic course.

RECERTIFICATION INFORMATION

There is no recertification requirement.

Continuing education requirements: none.

BACKGROUND INFORMATION

Travel agents use their specialized knowledge and skills to help clients plan and execute trips. The nature of their responsibilities depends largely on the size and specialty areas of the particular agency. If the agency is a one-person business, the agent may be involved in activities as diverse as promotion and selling to filing and itinerary planning. In a large agency several agents may share responsibility for specialty areas such as resort vacations, group tours, or professional travel, while clerks and secretaries handle much of the paperwork. Travel agents are concentrated in major population centers where the best business opportunities exist. A travel agency must have the approval of major carrier conferences, such as the International Air Transport Association for foreign travel, Air Traffic Conference for domestic travel, and Cruise Lines International Association for ocean travel, before it can earn commissions.

Although some travel agencies prefer to hire college graduates, personal qualifications and experience are often more important than academic preparation. Desirable qualities include patience, a pleasant speaking voice, a memory for details, aggressiveness, and an ability to work well under pressure. Important courses in either high school or college include physical and cultural geography, foreign languages, history, and psychology. Office and computer skills as well as business math also are considered assets.

Some of the specialized learning that occurs on the job also can take place in a classroom setting. There are a number of academic programs in Pennsylvania that prepare individuals for careers in the travel industry. Some providers, like Widener College and Montgomery County Community College, offer a two-year tourism degree option. Others, like the Wilma Boyd School in central Pennsylvania, offer shorter certificate programs. Many other proprietary and vocational-technical schools provide travel training. The American Society of Travel Agents' (ASTA) own correspondence and classroom program is the only nationally-recognized educational preparation to become a travel agent. A person who has been hired by a travel agency is eligible to take ASTA proficiency tests in international air, domestic air, steamships, or hotels. There is no specific academic preparation for the tests. A certificate is received upon successful completion of a test section.

ASTA is the major professional association for travel agents, followed in size by the Association of Retail Travel Agents (ARTA). Other smaller and more specialized organizations include the National Tour Brokers Association, the American Automobile Touring Alliance, and the Association of American Air Travel Clubs. ICTA is a state-licensed school that provides certification and professional identity for experienced travel agents as well as continuing education for its graduates and others. ICTA functions independently of all professional associations but fulfills many of the educational needs of their members.

Nationally there are over 5,000 practicing CTCs and another 7,500 more presently enrolled in ICTA programs. Since most CTCs are already owner-managers with considerable work experience, certification is more a mark of distinguished achievement than an asset in securing employment. The title does assure clients of professional competence and may enhance the agency's reputation among colleagues, carriers, and clients.

Travel agents are licensed in some states, but licensure proposals in Pennsylvania have not had the support of practitioners. Some feel that "grandfathering" exempts those who need regulation the most. Previous licensure proposals would not have mandated continuing education for travel agents.

CLIMATE FOR CONTINUING EDUCATION

ICTA recognizes the need for continuing education for travel agents and sponsors three-day seminars for its graduates and others in metropolitan areas throughout the country. The Executive Management Seminar Series is aimed at the present or aspiring owner-manager, but each has a distinct theme such as marketing strategies, stress management, and legal issues. Transportation to seminars is free to all Air Traffic Conference agents. Managers generally support employees' participation in these seminars. ICTA also charters the

establishment of regional education forums at the request of at least fifteen CTC students or graduates in a local area. Education forums foster professional identity and coordinate continuing education for their members. At least two meetings must be held over a twelve month period to maintain the charter. In Pennsylvania forums have been established in Philadelphia and Pittsburgh to date. ICTA is collaborating with major travel corporations in the production of a textbook for mid-level travel agents. Studying the textbook combined with at least two years of experience will prepare agents for the ICTA Travel Management Program. ICTA has developed two new programs, Travel Career Development and Risk Management. The Travel Career Development Program is directed to travel counselors who have worked for an agency for about a year and want to become more knowledgeable, but who are not ready for the CTC management course. The Risk Management Program offers concentrated management courses for graduate CTCs and other serious travel professionals to pursue through local study groups.

Some colleges and universities cooperate with local travel agencies to present continuing education workshops or extended courses in travel management; Penn State has presented such programs. Resorts and carriers often sponsor trips and programs to promote their own locations or services. The major airlines deliver short courses in the use of their computer systems. Travel agents also may accompany agency-planned group tours to familiarize themselves with different locations.

Continuing education for entry and mid-level travel agents seems to be lacking, even in metropolitan areas. What little is available is targeted at people who already have substantial work experience. However, it is unclear whether agents really perceive a need for continuing education. Given the urgent, pressured nature of the travel business, programs would almost have to occur after business hours or on weekends in a very accessible location. There is a good possibility that owner-managers would support employees' participation in training if it did not interfere with their work. Possible topic areas include physical and cultural geography, interpersonal skills, use of available resources, and business math. Agency managers mentioned these as areas in which their agents may be weak.

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URBAN AND REGIONAL PLANNING

There is no mandatory licensing or certification of urban or regional planners in Pennsylvania. However, a voluntary professional certification program is provided through the American Institute of Certified Planners (AICP) of the American Planning Association (APA), the national association which is concerned with the qualifications, standards, and development of the profession.

CERTIFICATION INFORMATION

AICP offers two membership categories: full and associate. Full members are those persons certified by AICP. Associate membership is a provisional membership category for those persons working toward certification. In order to be certified by AICP, an individual must:

- I. Be a member of APA.
- II. Meet ONE of the following options:
 - A. Have a graduate degree in planning from a recognized or accredited program, plus two years of professional planning experience, or
 - B. Have a graduate degree based on two or more years of full time graduate study, plus four years of professional planning experience, or
 - C. Have a baccalaureate degree in planning from a recognized or accredited program, plus four years of professional planning experience, or
 - D. Have a graduate degree based on one but less than two years of full time graduate study, plus five years of professional planning experience, or
 - E. Have a baccalaureate degree, plus six years of professional planning experience, or
 - F. Have ten years of professional planning experience.
- III. Pay an examination fee.
- IV. Successfully complete the AICP examination.

The written examination is designed to evaluate the applicant's understanding of, and ability to apply, a basic core knowledge central to the field of planning and elements of specialized areas of knowledge, as defined by AICP. The examination consists of 150 questions, and applicants are allowed three hours in which to complete it. It is developed and administered by Educational Testing Service and is given once a year, in May, in about 200 colleges and universities throughout the nation. A score equivalent to 72 percent or better is needed to pass the examination.

In order to become an associate member of AICP, an individual must:

- I. Be an APA member.
- II. Be within two years of meeting one of the education/experience options required for full membership.

Associate membership is limited to a two-year period. Associate members may take the AICP examination during this period. Upon passing the examination and completing the remaining experience requirement for full membership, an associate member may become a full member of AICP.

RECERTIFICATION INFORMATION

Continued certification is contingent upon payment of annual APA, AICP, and local chapter dues.

Continuing education requirements: none.

BACKGROUND INFORMATION

Urban and regional planners work in many different agencies of governmental and nongovernmental organizations. They engage in physical planning, including land use, community facilities, transportation, and housing. Social planning, which includes planning and developing services for health, education, and welfare; and economic planning are other aspects of the urban or regional planner's function.

Licensing of urban planners exists in only two states, Michigan and New Jersey. This is not seen as indicative of a trend toward licensing in other states. Over the past ten years, the American Institute of Planners (AIP), now part of APA, discussed the issue of licensing. This group decided not to initiate or support licensing efforts by states. AIP did decide to make acceptance for membership in the association more stringent by adding an examination requirement.

In 1978, AIP consolidated with the American Society of Planning Officials, an association of professional and nonprofessional planners including planning commissioners and mayors, to form a new organization, APA. APA membership is available for anyone interested or engaged in planning, but AICP certification is reserved for professional planners. If an individual is certified by AICP, he may use the initials "A.I.C.P." after his name as a professional designation. There are currently about 5,000 AICP members in the nation.

The Planning Accreditation Board (PAB), a subunit of AICP and the Association of Collegiate Schools of Planning, accredits planning degrees. Currently, degree programs have "recognized" status, due to a transition from the former recognition program of APA. The PAB has not yet been granted the status of an accrediting agency. There are about eighty recognized planning programs in the nation. The PAB recognizes the master's program in urban and regional planning at Penn State's Capitol Campus. The Departments of Architecture and Geography at University Park include planning options in their programs. The University of Pennsylvania has programs in urban and regional planning at the master's and doctoral levels, and the University of Pittsburgh

offers master's and doctoral programs in urban planning. Many small colleges are adding planning courses, and many of the traditional urban studies programs are shifting their emphasis toward planning.

CLIMATE FOR CONTINUING EDUCATION

AICP is developing a continuing education program for its members, as well as for other planners. Courses are offered by APA and AICP at national APA conferences. In addition, Planners' Training Services of APA offers workshops several times each year. AICP recently has initiated other continuing education services, including audiocassettes, workshops, and an extensive inventory of other continuing education activities.

The Pennsylvania Planning Association's annual conference provides a continuing education opportunity through workshops and discussion groups. Many local APA chapters offer their own workshops, and AICP and APA may assist them in developing programs. There are three Pennsylvania chapters of APA: Eastern, Central, and Pittsburgh Metropolitan. Educational programming by chapters has been most extensive in the Philadelphia-Bucks County area.

Although there are opportunities for continued professional development, planners do not feel that the market is saturated, and there is interest in participation. The approximately 2,000 planners in Pennsylvania represent a modest sized potential audience. Although Penn State has not provided many continuing education programs for planners in the past, program developers might consider doing more in the future. Topics which have been suggested include updating in new planning concepts and applications, working with limited resources, legal trends and court decisions, quantitative methods, communications skills, and economic development and community planning and management.

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VETERINARY MEDICINE

In Pennsylvania the practice of veterinary medicine is regulated by the Veterinary Medicine Practice Act of 1974. Under this Act, the Pennsylvania State Board of Veterinary Medical Examiners licenses qualified individuals to practice veterinary medicine.

LICENSING INFORMATION

To be licensed to practice veterinary medicine, an individual must:

- I. Be eighteen years of age or over.
- II. Be a graduate of an approved school or college of veterinary medicine.
- III. Pay an application fee and an administration fee to take the examination. This fee must be paid each time the written examination is taken, but allows for one repeat of the oral examination.
- IV. Pass an examination administered by the Board. The examination includes a national, written examination, a written clinical competency section, and an oral section administered by the Pennsylvania Board.

Foreign graduates must complete the American Veterinary Medical Association (AVMA) Education Commission for Foreign Veterinary Graduates program before being eligible for licensing.

Licensure is not required of doctors of veterinary medicine (D.V.M.) who are engaged only in teaching and research and hence do not actually practice veterinary medicine. A D.V.M. employed by the federal government need not be licensed by Pennsylvania to perform his official duties within the Commonwealth.

RELICENSING INFORMATION

Licenses are renewed biennially with the payment of a relicensing fee. Licenses expire November 30 of each even-numbered year.

Each license holder is required to attend eight clock hours of educational programs in the twenty-four months preceding each renewal date.

BACKGROUND INFORMATION

Most veterinarians in Pennsylvania work with small animals, many work with both small and large animals, and relatively few limit their practices to large animals. In the past, all veterinary students received the same training regardless of their preferences for large or small animals work, but within the past decade this has changed. At most schools of veterinary medicine students now take a core of common courses and then select from options in the areas of small or large animals, research, or other interests.

After completing veterinary school, a D.V.M. may undergo additional training to specialize in a species (e.g., bovine, equine) or a discipline (e.g., pathology, surgery). National board certification is granted in a number of specialty areas upon completion of prescribed educational and/or experience requirements and passage of an examination. Some specialty boards require continuing education for maintenance of board certification. Board certification in a specialty area is a professional designation and as such is voluntary; a D.V.M. may limit his/her practice to a specific area without being board certified.

The American Veterinary Medical Association (AVMA) is the national professional organization for D.V.M.s. Within AVMA there are a number of interest and specialty groups, including those for specialty certification described above. The largest of these groups is the American Animal Hospital Association, an interest group for veterinarians working with small animals. While this group has no specific educational requirements or examination for membership, it does have standards that must be met by any D.V.M. wishing to join. The primary purposes of this group are the provision of continuing education programs and encouragement in the upgrading of animal hospitals.

The Pennsylvania Veterinary Medical Association (PVMA) is a constituent association of AVMA and serves as the parent organization for fifteen local associations and provides leadership for the profession within the state. Nearly 1,100 of the approximately 1,300 veterinarians licensed to practice in Pennsylvania are members of PVMA.

The licensing examination for veterinarians is considered fairly difficult. Applicants from foreign schools of veterinary medicine often have trouble passing it because their training does not include all that is offered by schools in this country. Each state may use a national board examination or may make its own examination. Each state using the national examination determines its own passing grade. Use of the national examination by many states is an aid in establishing reciprocity for practice. Some states conduct oral and/or practice examinations in addition to the written examination.

The supply of veterinarians is approximately equal to the demand in the country at this time. However, a study of veterinary manpower needs, conducted by Arthur D. Little for AVMA in 1978, indicates that there will be a surplus of doctors of veterinary medicine within a decade, given the output of existing veterinary schools. It has been suggested that in the future D.V.M.s could fill more positions in research, government, and in colleges of the various health professions.

Within the past ten years, animal technicians have gained recognition as an occupational group within the veterinary medicine field. Prior to the 1970s, a veterinarian might train a person to work with him in the role of an animal technician, but there was no uniformity or cohesiveness to animal technicians as a group. PVMA has worked cooperatively with the animal technicians to help them establish a statewide professional organization. Certification of animal technicians is a provision of the Veterinary Medicine Practice Act, and is controlled by the State Board. Educational requirements include completion of a two-year training program and supervised practical

experience. Animal technicians may do many of the things a veterinarian does, working under the supervision of a D.V.M., exclusive of diagnosis and surgery.

CLIMATE FOR CONTINUING EDUCATION

AVMA, PVMA, and the local associations in Pennsylvania all offer continuing education for practicing veterinarians in abundance. Difficulty filling some programs indicates that more continuing education may be offered than is necessary to meet the demand. Consolidation of programs both within the state and with neighboring states has been suggested as a means of increasing attendance and encouraging optimum program quality.

The University of Pennsylvania, which has the only school of veterinary medicine in the Commonwealth, works with PVMA on continuing education programming. Two veterinarians in the Cooperative Extension Service at Penn State provide continuing education programs that are attended by veterinarians. They also work with people owning, raising, and breeding animals. There is little need for further input from Penn State in the continuing professional education of practicing D.V.M.s at this time. However, should the predictions of the Arthur D. Little report come to pass, Penn State might well help veterinarians prepare for positions in allied fields, such as the biological sciences in which advanced degrees as well as the D.V.M. are required.

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SYNOPSES

The following synopses address nine additional fields which meet the criteria for inclusion in this study but were judged appropriate for more abbreviated reports for one or both of the following reasons:

1. The number of practitioners in Pennsylvania is small.
2. The field is an emerging one, and as such has not developed uniform credentialing. In some cases, regulatory legislation is pending.

As with the information presented in the preceding summaries, the synopses are intended to serve as aids to continuing educators as they identify and work with continuing professional education target groups.

Actuarial Science

There is no mandatory licensure or certification of actuaries in Pennsylvania. However, the federal Joint Board for the Enrollment of Actuaries provides the designation of Enrolled Actuary for pension actuaries. The Pennsylvania Insurance Department also requires actuaries performing specific functions to meet particular standards.

Actuaries design insurance and pension plans that can be maintained on a sound financial basis. They may work for insurance companies, insurance rating organizations, and governmental agencies or may be employed as consultants who set up pension and welfare plans for private companies, unions, and government agencies. Within the insurance field actuaries might specialize in the property/casualty field or in life and health insurance. Many consulting actuaries are employed in multi-discipline firms which provide professional services in such fields as accounting, management consulting, risk management, executive compensation, insurance brokerage, and computer science.

The primary means by which an actuary gains professional status is through a series of examinations offered by two major actuarial societies: Society of Actuaries (SOA), and Casualty Actuarial Society (CAS). Initial membership in each society is attained by passing a specified number of examinations, but full membership, or fellowship, is not attained until all examinations offered by the specified society are completed successfully. Although a baccalaureate degree is not required to sit for the examinations, in practice most actuaries have college backgrounds with concentrations in mathematics, business, statistics, or actuarial science. Employability is greatly enhanced if at least two examinations are taken before graduation. Initial professional society membership is a necessity, but not all actuaries continue the examination process to the fellowship level.

In order to work in the pension field, an individual must obtain enrollment under the Joint Board. Enrolled Actuaries can certify that pension plans under the jurisdiction of the Employee Retirement Income Security Act of 1974 (ERISA) meet the minimum employer funding requirements. Enrollment is obtained by passing basic and pension examinations co-sponsored by the Joint Board and professional societies and having three years of responsible pension actuarial experience. The Joint Board determines its own passing scores for the examinations.

In addition to joining a professional society, most actuaries become members of the American Academy of Actuaries (AAA), the umbrella organization for all of the societies except ASPA. Membership in the Academy (M.A.A.A.) is comparable to national certification, and requires three years of responsible actuarial experience and initial membership in one of the affiliated professional societies. Enrolled Actuaries under ERISA provisions are also eligible.

Pennsylvania actuaries who certify the solvency of municipal pension plans must meet Pennsylvania Insurance Department requirements which specify that an actuary must be an M.A.A.A., as must actuaries who sign the annual statements of life insurance companies. Nonmembers of AAA may demonstrate equivalent education and experience requirements to the Department.

Most of the continuing education opportunities for actuaries are provided by the professional societies. SOA and CAS offer home study materials, journals, and study clubs in major cities to prepare individuals for the actuarial examinations. The societies each have several conferences yearly as well, and most have initiated seminars and workshops. There are some regional and metropolitan actuarial clubs, such as one in Philadelphia, which hold meetings with educational components. The Conference of Actuaries in Public Practice, a national organization of consulting actuaries, sponsors a three-day annual meeting in the fall and cosponsors (with AAA) a two-day meeting for Enrolled Actuaries each spring. A few for-profit organizations also provide continuing education. Such professional development activities are important for actuaries, since they must remain aware of legislative, economic, and health trends. Current, practical information on small pension plans is of interest to pension actuaries. Because there are fewer than 10,000 actuaries in the nation, and many represent clients throughout the country, they are willing to travel out of state to continuing education events. Many actuaries indicate a preference for attending programs sponsored by the professional societies, and feel that it would be difficult for most universities to attract the widely recognized speakers needed to compete with current continuing education providers.

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Athletic Coaching

There is no mandatory licensure or certification of athletic coaches in Pennsylvania.

The information included in this report focuses primarily on secondary school athletic coaches but is also relevant to coaches working in higher education or professional settings. Until recently, individuals hired by school districts as part time athletic coaches were required to be certified through the State Department of Education. As of March, 1980, this requirement and the state certification program were eliminated in order to allow school districts greater flexibility in employing coaches. However, districts must give first hiring priority to certified staff members employed within the district. Also, all coaches recommended for hiring should meet specified criteria of the State Board of Education. These criteria state that coaching preparation should include first aid which emphasizes preventing athletic injuries, and knowledge of principles related to training and conditioning for sports. In addition, coaches should have an understanding of school and community responsibility. School districts now will assume the responsibility of reviewing an applicant's credentials and assessing the adequacy of each individual's qualifications.

Although certification for coaches no longer exists, it is felt that most colleges and universities offering academic preparation will continue to offer coursework in correspondence with the former certification requirements. The programs generally include academic credit in first aid and athletic training and conditioning, coaching techniques, kinesiological and physiological foundations of teaching, socio-cultural foundations, and human growth and development.

The demand for coaches is greater than the supply, which is one reason the certification requirement was eliminated. Because of this demand an individual may be hired to coach on the basis of his or her coaching record rather than because of formal training in the field.

Educators express concern that coaches may lack not only foundational training, but also may be substantially outdated in their knowledge of new developments and techniques for training and health care. Coaches appear to be interested in coaching clinics that deal with game strategy, plays, weight lifting programs, etc. rather than health care, dealing with injuries, and related topics. These clinics are usually offered by independent non-profit associations or groups.

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Career Counseling

There is no mandatory licensure or certification for career counselors in Pennsylvania. Voluntary certification is available through the Pennsylvania Professional Counselor Certification Board of The Pennsylvania Personnel and Guidance Association (PPGA) and through the National Board of Certified Counselors.

Career counselors may practice privately or be employed by educational institutions and social service agencies to help clients plan satisfying career/lifestyles. Most career counselors possess a master's degree in counselor education or counseling psychology. Experience in business and industry, especially personnel management, is also highly valued by the employers of career counselors. The National Board of Certified Counselors recently implemented its voluntary certification program. Requirements to become a National Certified Counselor include three professional reference assessments and completion of a written examination. Further information on the certification and proposed licensure of counselors in general can be found in the synopsis on Mental Health Counseling.

The major professional associations for career counselors are the American Association for Counseling and Development (AACD) and its Pennsylvania affiliate, the Pennsylvania Counseling Association (PCA); the National Vocational Guidance Association (NVGA); the American College Personnel Association (ACPA) and its Pennsylvania affiliate, the Pennsylvania College Personnel Association (PCPA); the College of Placement Council (CPC); and regionally, the Mid-Atlantic Placement Association (MAPA).

National and regional professional associations and private consulting firms offer a wide variety of continuing education opportunities for career counselors. In addition, many institutions provide in-house staff development for counselors. Some institutions also provide training for staff members of nearby colleges and universities. At this time, continuing education is voluntary. There is great interest and enthusiasm for continuing professional education among career counselors but limited resources to make it possible. Current areas of interest include counseling the non-traditional student, computerized career counseling, group approaches to counseling, and developing a career resource center.

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Dental Assisting

There is no mandatory certification or licensure of dental assistants. However, voluntary certification is provided through the Dental Assisting National Board.

Dental assistants work with dentists as they examine and treat patients. They also perform a variety of duties that do not require the dentist's professional knowledge and skill. Pennsylvania's Dental Law Rules and Regulations specify the duties which a dental assistant cannot perform; any duty that is not specifically mentioned can be handled by a dental assistant, provided that he/she is under the direct supervision of a dentist. Most dental assistants are trained on the job, but an increasing number attend formal postsecondary school programs which are offered primarily at junior and community colleges or vocational technical schools. Eleven Pennsylvania schools have dental assisting programs which are accredited by the Commission on Dental Accreditation.

Certification is obtained through education or experience and an examination. There are over 800 Certified Dental Assistants (CDAs) in Pennsylvania. Both the American Dental Assistants Association (ADAA) and the Pennsylvania Dental Assistants Association (PDAA), its state affiliate, strongly endorse certification. The Pennsylvania Dental Association has passed a resolution that member dentists employ only CDAs and compensate them accordingly. However, this resolution is not binding and some dentists continue to hire untrained assistants.

ADAA and PDAA are affiliated with local dental assistant organizations, and membership is tripartite. However, because many rural areas in Pennsylvania do not have local associations, dental assistants from these regions join only PDAA and ADAA.

Continuing education is one way of maintaining certification, and local dental assistant associations are mandated by ADAA to provide at least six hours of continuing education programming per year. National and state meetings also offer opportunities to obtain continuing education credits. Educational institutions also provide continuing education programming, but attendance is sporadic at such programs.

Participation in continuing education is most likely if employers pay registration fees and encourage attendance. Dental assistants indicate an interest in learning current dental techniques, pharmacology, and forensic dentistry. Evening or weekend workshops would probably attract more participants than programs held during working hours.

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Financial Analysis

There is no licensure of financial analysts in Pennsylvania. Voluntary certification is provided by the Institute of Chartered Financial Analysts (ICFA) which is associated with the Financial Analysts Federation (FAF).

Financial analysts are professionally engaged in investment management and securities research analysis. The preferred academic preparation for an analyst position is a baccalaureate degree in finance or economics. Financial analysts may work in bank trust departments, insurance companies, merger and acquisitions departments of major corporations, or firms dealing in securities, mutual, or pension funds. There are an estimated 450 FAF members in Philadelphia and another 250 in Pittsburgh.

The major professional association for financial analysts is FAF. Its associate organization, ICFA, administers a series of three examinations that certify analysts at three progressively sophisticated levels of knowledge. The seven fields of knowledge covered by the examinations are ethical and professional standards, financial accounting, quantitative techniques, economics, fixed income securities, equity securities, and portfolio management. The Chartered Financial Analyst (CFA) designation is widely recognized as a mark of professional distinction.

FAF holds an annual conference that focuses on professional development, as well as periodic seminars and symposia throughout the country. Local member societies of FAF, such as Financial Analysts of Philadelphia, Inc. or the Pittsburgh Society of Financial Analysts, Inc., meet regularly for educational purposes, as do CFA study groups. Each year FAF sponsors three formal study programs in cooperation with selected universities and publishes a professional journal for members.

Financial analysts report an eagerness to cooperate with educational institutions in providing continuing education for their colleagues. Topics of special interest include interest rate futures and other new financial instruments, mortgage-backed securities, mathematical modeling of investments, and industry updates.

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Health Planning

There is no mandatory licensure or certification of health planners in Pennsylvania.

Health planners may work for public health departments, health insurance companies, emergency medical services, hospitals, or private consulting firms. Many health planners are employed by health systems agencies (HSAs). HSA planners develop and implement a Health Systems Plan approved by the regional health planning board in accordance with federal and state legislation. One of their major responsibilities is the review of existing or proposed facilities to determine public need. HSA planners also identify health problems, provide technical assistance to other organizations, develop programs, and maintain an inventory of existing services as well as a data base for decision-making, community education, and organization activities.

Educational requirements for health planners are not uniform due to the emerging nature of the occupation. The preferred preparation is a master's degree in public health or health planning and administration, such as that offered by the Penn State program. More technical positions may require more specialized education.

The major health planning professional associations are the American Health Planning Association (AHPA) and the American Public Health Association (APHA). Both AHPA and APHA offer continuing education for health planners. However, the primary sources are regional training centers, called Alpha Centers for Health Planning, which receive support from the same federal agency (Department of Health and Human Services) that funds the HSAs. The Maryland-based Alpha Center is charged with providing technical and policy assistance and educational materials to health planners within the Mid-Atlantic region. In addition to maintaining an extensive list of publications, the Alpha Centers and ASTI program sponsor frequent educational programs on topics ranging from financial analysis to political action and health planning.

HSA planners are keenly interested in continuing education to update and improve technical skills; however, severe budget cuts and a heavy workload prohibit their participation in all but the least expensive and time consuming programs. Those in the field note that as the need for continuing education has risen, opportunities for affordable continuing education have decreased. Suggested topics of interest include cost containment, statistical techniques, hospital financing and services, management skills, planning methodologies, group dynamics, community organization, and competition in health care.

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Marriage and Family Therapy

There is no licensure of marriage and family therapists in Pennsylvania. Voluntary credentialing is provided through clinical membership in the American Association for Marriage and Family Therapy (AAMFT) and its Pennsylvania division, the Pennsylvania Association for Marriage and Family Therapy (PAMFT).

Marriage and family therapists help married couples and families by paying particular attention to relationship issues from the point of view of the whole marital or family system. Many therapists are also credentialed as psychologists, nurses, social workers, or clergy, although the unique approach to the whole relationship system suggests to some practitioners the need for particular credentialing. There are an estimated 1,500 individuals in Pennsylvania who are providing marriage and family therapy yet have no credentials.

There are almost 500 clinical members of AAMFT in Pennsylvania (with more than 11,000 in the U.S. and Canada). Clinical membership requires (1) the completion of a master's or doctoral degree in marital and family therapy from a regionally accredited educational institution, or an equivalent course of study and degree as defined by the Board of AAMFT and (2) the completion of two calendar years of supervised work experience in marital and family therapy.

The University of Pennsylvania and the Philadelphia Marriage Council co-sponsor a certification program for students who already hold related degrees. Clinical membership in AAMFT serves as the primary credential in states which do not have licensure.

The major professional associations specifically for marriage and family therapists are AAMFT and PAMFT. The American Psychological Association, the American Association of Counseling Psychologists, the National Institute of Marriage and Family Relations, and the American Family Therapy Association are other related professional organizations.

Continuing education currently is suggested and soon will be required for the maintenance of clinical membership in AAMFT. Continuing education credits are offered at national, regional, and divisional meetings; through reciprocal agreements with other professional associations; and through the national or divisional approval of certain centers or programs. Topics offered have included separation and divorce, families and alcoholism, intergenerational dynamics, delinquency, and family systems.

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Mental Health Counseling

There is no licensure of mental health counselors in Pennsylvania. Voluntary certification for all counselors is provided by the National Academy of Certified Mental Health Counselors (NACMHC) or the American Mental Health Counselors Association (AMHCA). The Pennsylvania Counseling Association (PCA) also certifies counselors through the Pennsylvania Counseling Association Counselor Certification Board.

Mental health counselors work in a wide variety of settings including educational institutions, community agencies, and private practice. College student personnel workers, social workers, or clergy may all be involved in mental health counseling. Most counselors have completed a master's degree in counselor education, counseling psychology, or a related area.

Counselor certification is an asset for those who wish to enter private practice and are not otherwise credentialed. NACMHC certification requires a combination of academic preparation and supervised counseling experience. There is a national examination, but no requirement for continuing education. PPGA certification requires a minimum of nine hours of continuing education every three years. A proposed counselor licensure bill would include mandatory continuing education for all counselors in private practice. There are an estimated seven to eight thousand counselors in Pennsylvania who would be affected by the passage of this bill.

The major professional associations for mental health counselors are all divisions of the American Association of Counseling and Development (AACD), including the American Mental Health Counselors Association (AMHCA); the American School Counselors Association (ASCA); the Association for Counselor Education and Supervision (ACES); the American College Personnel Association (ACPA); and Pennsylvania affiliates, the Pennsylvania College Personnel Association (PCPA) and the Pennsylvania Association of Mental Health Counselors (PAMHC). PCA is the Pennsylvania affiliate of AACD.

Mental health counselors have a myriad of opportunities for professional development, primarily through their national and regional associations. The most active providers of continuing education for Pennsylvania counselors are PCA and ASCA. PCA's programming is designed to help members fulfill their certification obligations. Leaders are eager to cooperate with educational institutions in providing workshops and seminars. If counselors become licensed in Pennsylvania there will be an increased need for coordination among diverse regional providers such as individual institutions and agencies, associations, and private consulting firms.

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MUNICIPAL CLERKS AND SECRETARIES

There is no mandatory licensure or certification of municipal clerks or secretaries in Pennsylvania. Voluntary certification is provided through the International Institute of Municipal Clerks (IIMC).

Persons employed as municipal clerks in Pennsylvania generally are called township or borough secretaries, or city or county clerks. These appointed positions may be part or full time, depending on the size of the municipality. Responsibilities vary significantly, but usually include maintaining official records, council minutes, and ordinance and resolution books; answering inquiries from other departments and citizens; countersigning official documents; and preparing for council meetings. Clerks in communities without a municipal manager often assume many more administrative responsibilities than those employed under an administrator. Some persons hold titles such as "secretary/manager" which recognize the dual nature of their positions.

There is no standard academic preparation for municipal clerks or secretaries, and many obtain jobs on the basis of previous municipal work experience. IIMC's certification program leads to a Certified Municipal Clerk (CMC) designation, and is designed to increase the professionalism of municipal clerks and secretaries. Certification requirements include education and experience; the satisfactory completion of an IIMC-approved Municipal Clerks' Institute fulfills one educational requirement option. (Penn State offered such a program in 1979, but due to under-enrollment only one of the three courses was held.) Currently, clerks or secretaries wishing to obtain certification must attend an Institute out of state or meet alternate educational requirements.

The state professional association is the Pennsylvania Local Governmental Secretaries Association. Persons holding joint secretary/manager designations may be eligible to join the International City Management Association and the Association of Pennsylvania Municipal Managers.

IIMC strongly encourages continuing education, and its members are asked to undertake individual programs of professional development. CMCs may join the IIMC Academy for Advanced Education by participating in continued education of various sorts. Membership is maintained by demonstrating continued professional growth. IIMC holds annual conferences with educational sessions. In Pennsylvania, municipal clerks and secretaries who wish to remain updated in their field may take advantage of programs presented by the Department of Community Affairs. The Pennsylvania Local Government Secretaries Association also holds training conferences and meetings.

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Project Reports Available

The Practice Audit Model: A Process for Continuing Professional Education Needs Assessment and Program Development, March, 1981 (\$5.00).

Professional and Occupational Practice Requirements: A Continuing Professional Education Series (3rd Edition), December, 1984 (\$15.00).

Mainstreaming Continuing Professional Education: A Conceptual Approach and An Empirical Study, April, 1984 (\$10.00).

Establishing Foundations for University/Professional Association Collaboration, April, 1984 (\$5.00).

Working Papers Available

A Model and Process for University/Professional Association Collaboration, June, 1981 (\$5.00).

The Medical Audit: Implications for Continuing Medical Education, August, 1981 (\$5.00).

Project Reports and Working Papers may be ordered from Commonwealth Educational System Stores, 9 J. Orvis Keller Building, The Pennsylvania State University, University Park, PA 16802. Prices include postage and handling. Checks should be payable to The Pennsylvania State University.

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